FIG. 1

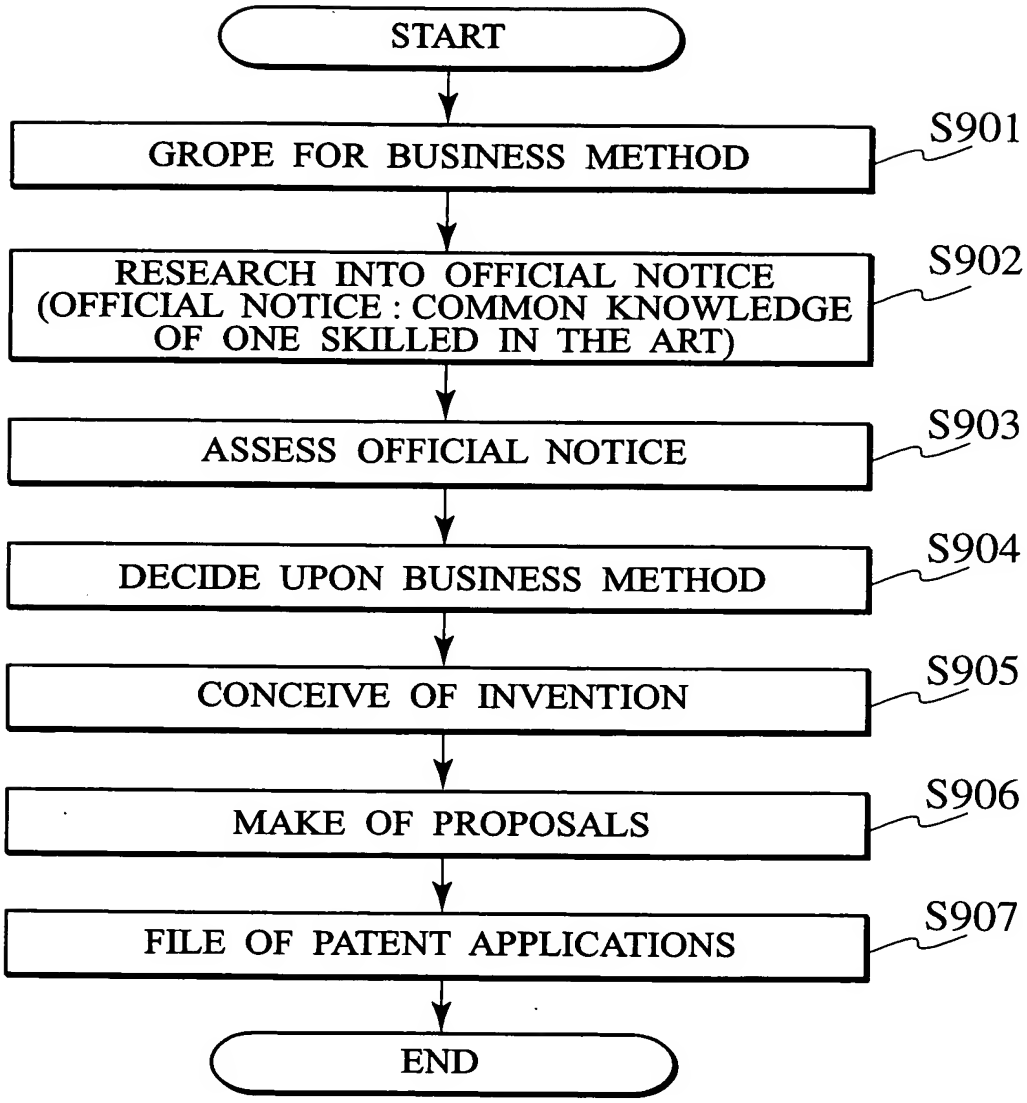

START
GROPE FOR BUSINESS METHOD
S901
RESEARCH INTO OFFICIAL NOTICE (OFFICIAL NOTICE : COMMON KNOWLEDGE OF ONE SKILLED IN THE ART)
S902
ASSESS OFFICIAL NOTICE
S903
DECIDE UPON BUSINESS METHOD
S904
CONCEIVE OF INVENTION
S905
MAKE OF PROPOSALS
S906
FILE OF PATENT APPLICATIONS
S907
END

FIG. 2

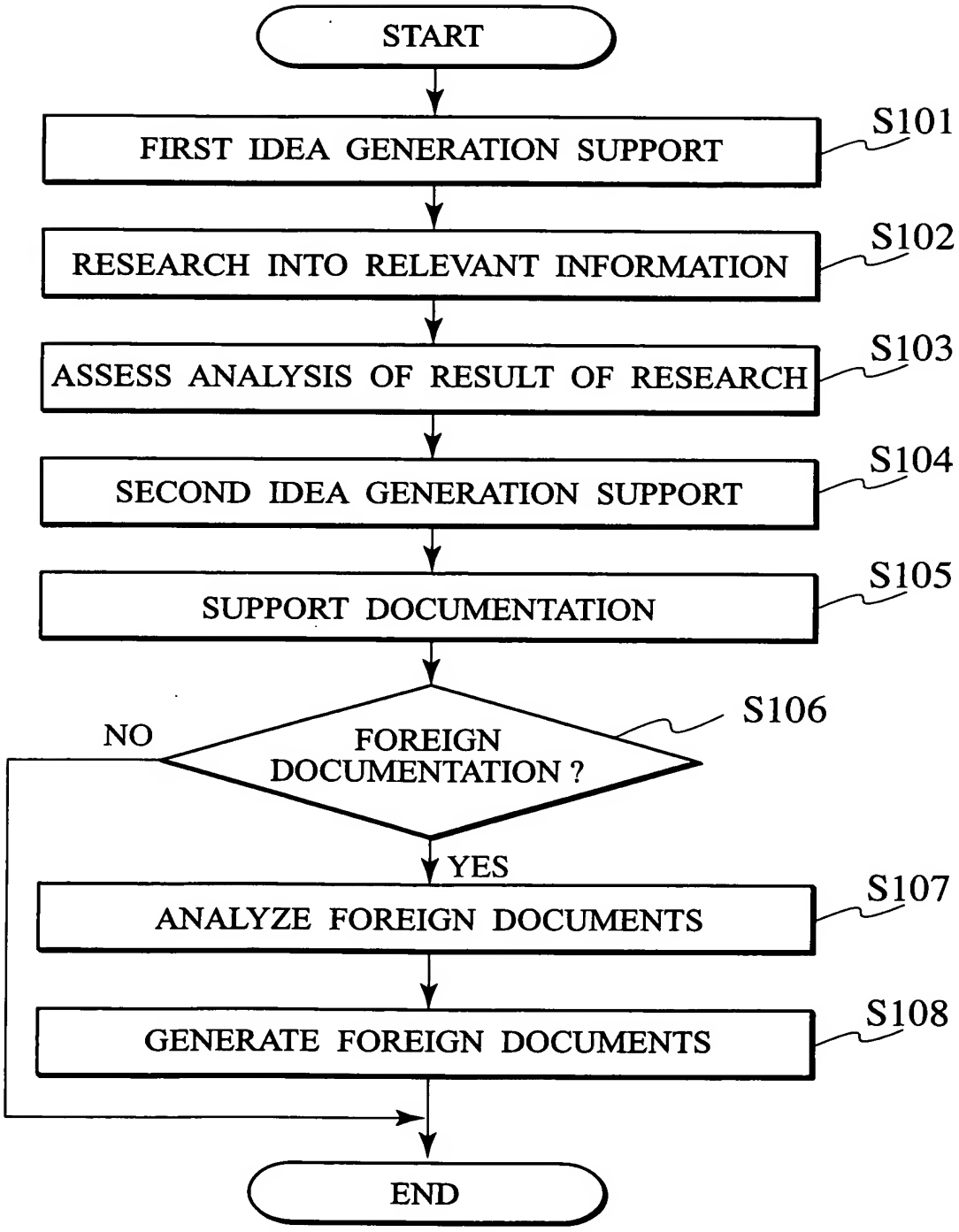

START
FIRST IDEA GENERATION SUPPORT
S101
RESEARCH INTO RELEVANT INFORMATION
S102
ASSESS ANALYSIS OF RESULT OF RESEARCH
S103
SECOND IDEA GENERATION SUPPORT
S104
SUPPORT DOCUMENTATION
S105
FOREIGN DOCUMENTATION ?
S106
NO
YES
ANALYZE FOREIGN DOCUMENTS
S107
GENERATE FOREIGN DOCUMENTS
S108
END

FIG. 3

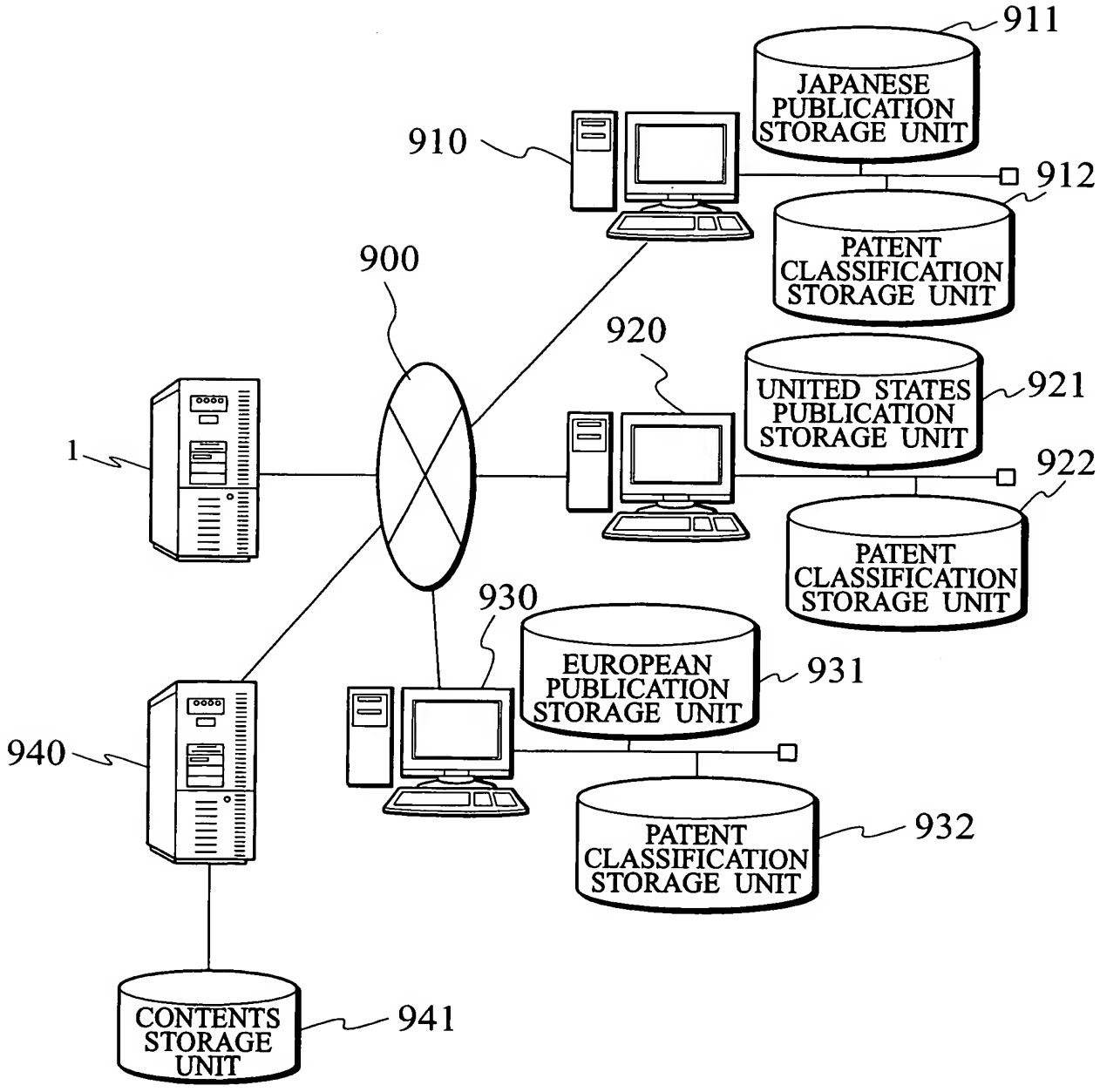

911
JAPANESE PUBLICATION STORAGE UNIT
910
912
PATENT CLASSIFICATION STORAGE UNIT
900
920
UNITED STATES PUBLICATION STORAGE UNIT
921
1
922
PATENT CLASSIFICATION STORAGE UNIT
930
EUROPEAN PUBLICATION STORAGE UNIT
931
940
PATENT CLASSIFICATION STORAGE UNIT
932
CONTENTS STORAGE UNIT
941

FIG. 4

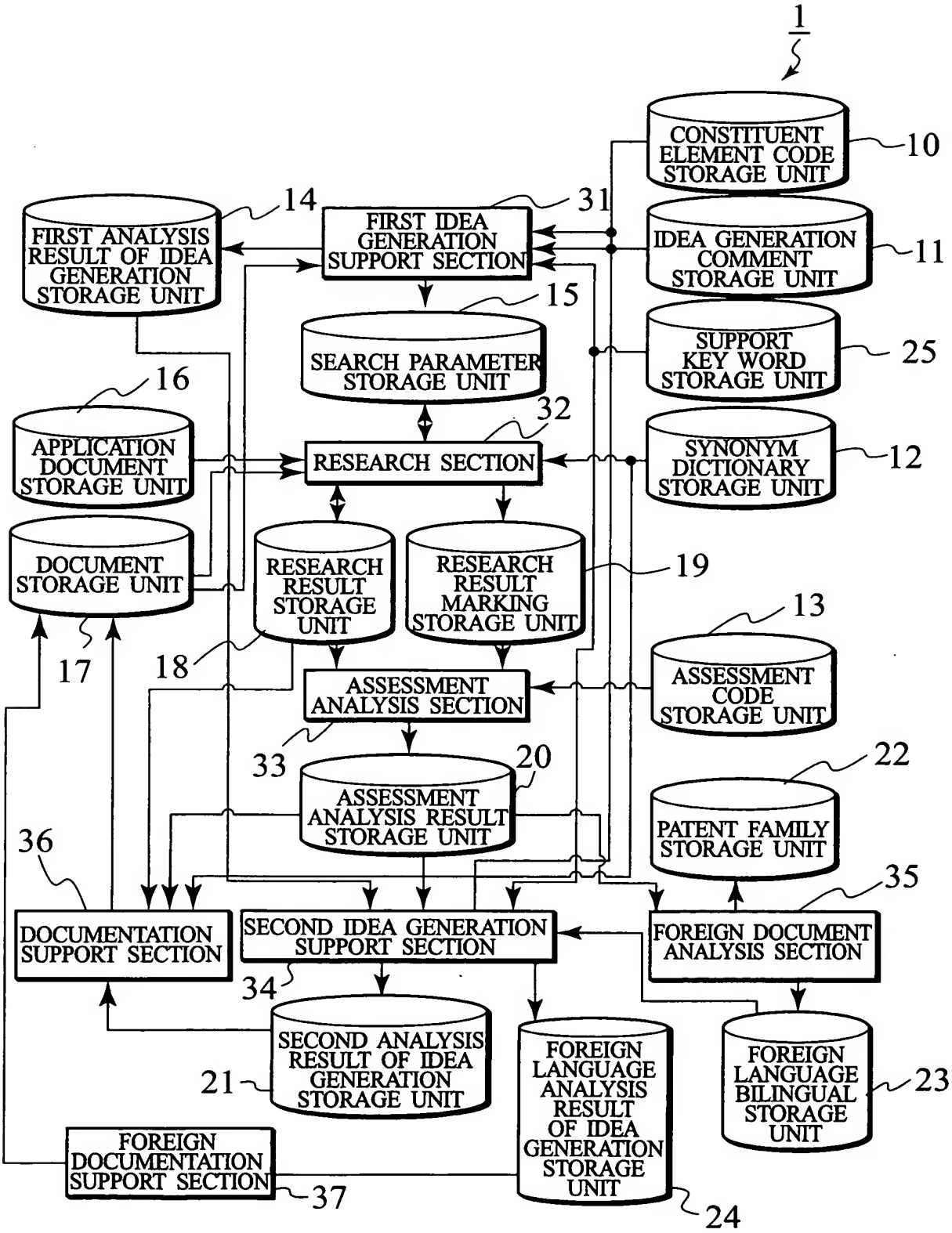

1
CONSTITUENT ELEMENT CODE STORAGE UNIT
10
FIRST ANALYSIS RESULT OF IDEA GENERATION STORAGE UNIT
14
FIRST IDEA GENERATION SUPPORT SECTION
31
IDEA GENERATION COMMENT STORAGE UNIT
11
SEARCH PARAMETER STORAGE UNIT
15
SUPPORT KEY WORD STORAGE UNIT
25
APPLICATION DOCUMENT STORAGE UNIT
16
RESEARCH SECTION
32
SYNONYM DICTIONARY STORAGE UNIT
12
DOCUMENT STORAGE UNIT
17
RESEARCH RESULT STORAGE UNIT
18
RESEARCH RESULT MARKING STORAGE UNIT
19
ASSESSMENT CODE STORAGE UNIT
13
ASSESSMENT ANALYSIS SECTION
33
ASSESSMENT ANALYSIS RESULT STORAGE UNIT
20
PATENT FAMILY STORAGE UNIT
22
36
DOCUMENTATION SUPPORT SECTION
SECOND IDEA GENERATION SUPPORT SECTION
34
FOREIGN DOCUMENT ANALYSIS SECTION
35
SECOND ANALYSIS RESULT OF IDEA GENERATION STORAGE UNIT
21
FOREIGN LANGUAGE ANALYSIS RESULT OF IDEA GENERATION STORAGE UNIT
24
FOREIGN LANGUAGE BILINGUAL STORAGE UNIT
23
FOREIGN DOCUMENTATION SUPPORT SECTION
37

FIG. 5

10

CONSTITUENT ELEMENT CODE	CONSTITUENT ELEMENT
E01	ROLLER
E02	LUBRICANT
E03	CPU
E04	CAD
⋮	⋮

FIG. 6

11

COMMENT CODE	COMMENTS
C00	NONE (INITIAL VALUE)
C01	NEEDS (SUPPLIER)
C02	NEEDS (USER)
C03	SEEDS
C04	PROPOSAL REFLECTION
C05	HIGH MARGIN PERCENTAGE
C06	HIGH RISK
C07	COST REDUCTION
C08	SPEEDUP
C09	RELIABILITY IMPROVEMENT
C10	LEADING TO MINIATURIZATION
⋮	⋮

FIG. 7

12

KEY WORD	SYNONYM	BROAD TERM	NARROW TERM
COMPUTER	ELECTRONIC CALCULATOR INFORMATION PROCESSOR PERSONAL COMPUTER	INFORMATION EQUIPMENT OFFICE EQUIPMENT	WORKSTATION WEARABLE COMPUTER MOBILE COMPUTER
CPU	CENTRAL PROCESSING ARITHMETIC UNIT ARITHMETIC UNIT CENTRAL PROCESSING UNIT		
⋮	⋮	⋮	⋮

FIG. 8

14

CARD No.	HIERARCHY	POSITION	PARENT CARD No.	THEME	WORDS	COMMENT CODE	CONSTITUENT ELEMENT CODE
1	0	0	-	PRESS APPARATUS			
2	0	1	-	RELIABILITY IMPROVEMENT	AIM AT ERROR RATE TO 7% OR LESS	C01	
3	0	2	-	PRODUCTIVITY IMPROVEMENT	AIM AT 10-FOLD IMPROVEMENT	C01	
4	0	3	-	COST REDUCTION	10% COST CUTTING	C01	
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
21	1	1	2	PROCESSING SPEEDUP	AIM AT 10-FOLD IMPROVEMENT	C01	
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
21a	2	a	21	TRANSPORTATION SPEEDUP	FEAR OF QUALITY DEGRADATION	C02	
21b	2	b	21	ROLLER SPEEDUP	AUTOMATIZATION OF CONTROLLER	C02	E01
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 9

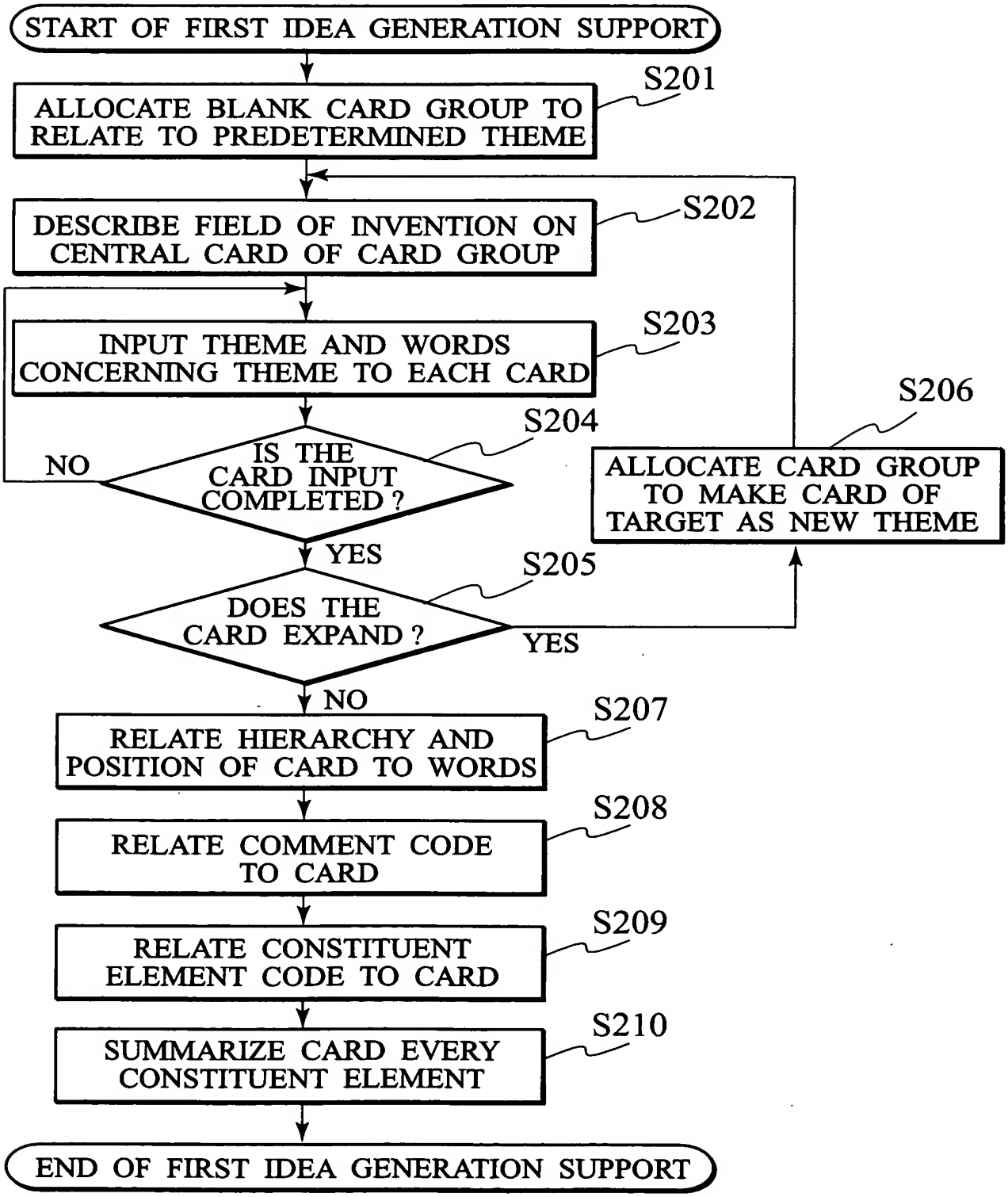

START OF FIRST IDEA GENERATION SUPPORT
ALLOCATE BLANK CARD GROUP TO RELATE TO PREDETERMINED THEME
S201
DESCRIBE FIELD OF INVENTION ON CENTRAL CARD OF CARD GROUP
S202
INPUT THEME AND WORDS CONCERNING THEME TO EACH CARD
S203
IS THE CARD INPUT COMPLETED ?
S204
NO
YES
DOES THE CARD EXPAND ?
S205
YES
NO
ALLOCATE CARD GROUP TO MAKE CARD OF TARGET AS NEW THEME
S206
RELATE HIERARCHY AND POSITION OF CARD TO WORDS
S207
RELATE COMMENT CODE TO CARD
S208
RELATE CONSTITUENT ELEMENT CODE TO CARD
S209
SUMMARIZE CARD EVERY CONSTITUENT ELEMENT
S210
END OF FIRST IDEA GENERATION SUPPORT

FIG. 10

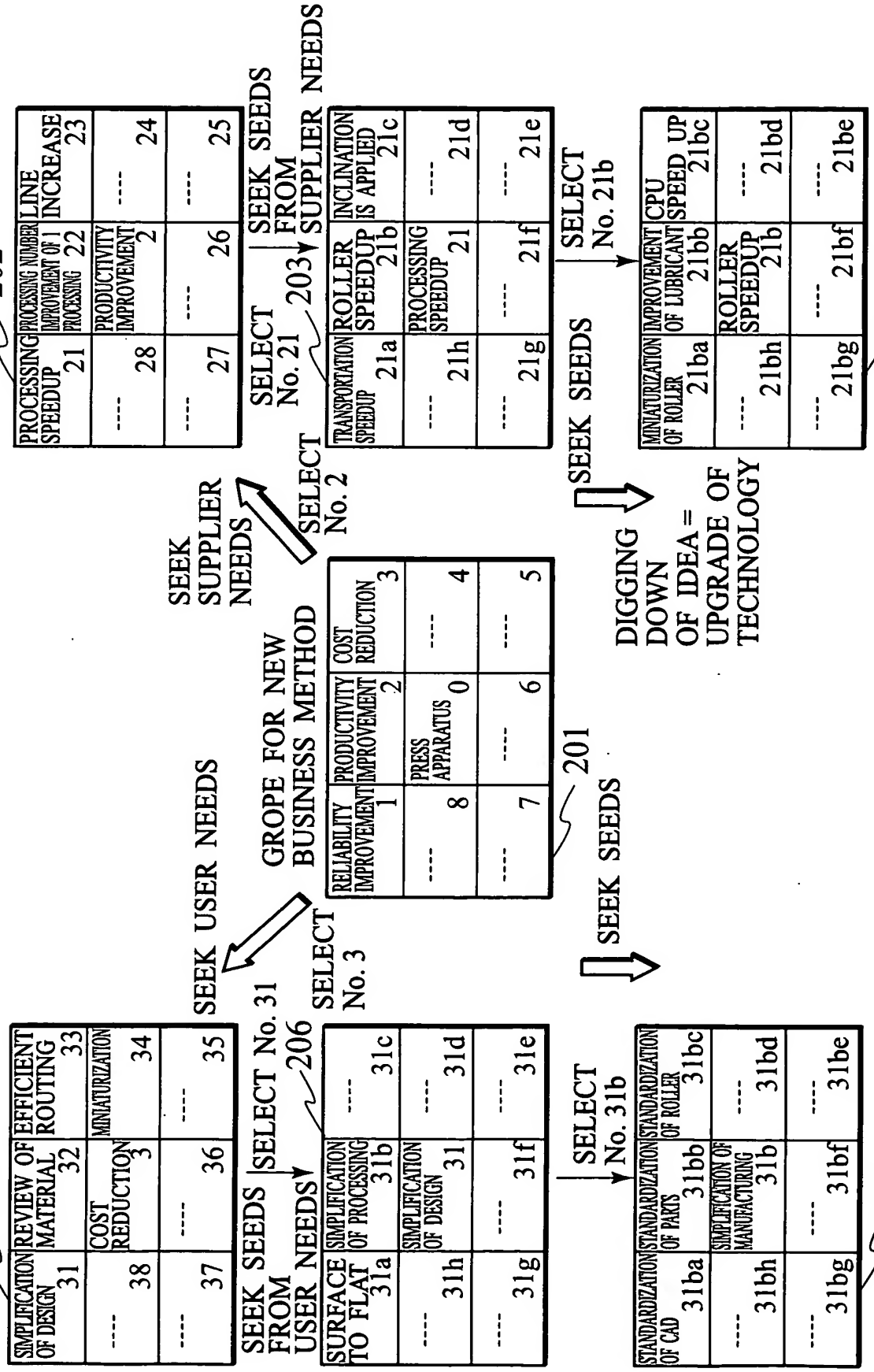

205
SIMPLIFICATION OF DESIGN 31
REVIEW OF MATERIAL 32
EFFICIENT ROUTING 33
--- 38
COST REDUCTION 3
MINIATURIZATION 34
--- 37
--- 36
--- 35
SEEK SEEDS FROM USER NEEDS
SELECT No. 31
206
SURFACE TO FLAT 31a
SIMPLIFICATION OF PROCESSING 31b
--- 31c
--- 31h
SIMPLIFICATION OF DESIGN 31
--- 31d
--- 31g
--- 31f
--- 31e
SEEK USER NEEDS
GROPE FOR NEW BUSINESS METHOD
SELECT No. 3
RELIABILITY IMPROVEMENT 1
PRODUCTIVITY IMPROVEMENT 2
COST REDUCTION 3
--- 8
PRESS APPARATUS 0
--- 4
--- 7
--- 6
--- 5
201
SEEK SEEDS
SELECT No. 31b
STANDARDIZATION OF CAD 31ba
STANDARDIZATION OF PARTS 31bb
STANDARDIZATION OF ROLLER 31bc
--- 31bh
SIMPLIFICATION OF MANUFACTURING 31b
--- 31bd
--- 31bg
--- 31bf
--- 31be
207
SEEK SUPPLIER NEEDS
SELECT No. 2
SELECT No. 21
203
SEEK SEEDS FROM SUPPLIER NEEDS
202
PROCESSING SPEEDUP 21
PROCESSING NUMBER IMPROVEMENT OF 1 PROCESSING 22
LINE INCREASE 23
--- 28
PRODUCTIVITY IMPROVEMENT 2
--- 24
--- 27
--- 26
--- 25
TRANSPORTATION SPEEDUP 21a
ROLLER SPEEDUP 21b
INCLINATION IS APPLIED 21c
--- 21h
PROCESSING SPEEDUP 21
--- 21d
--- 21g
--- 21f
--- 21e
DIGGING DOWN OF IDEA = UPGRADE OF TECHNOLOGY
SEEK SEEDS
SELECT No. 21b
MINIATURIZATION OF ROLLER 21ba
IMPROVEMENT OF LUBRICANT 21bb
CPU SPEED UP 21bc
--- 21bh
ROLLER SPEEDUP 21b
--- 21bd
--- 21bg
--- 21bf
--- 21be
204

FIG. 11A

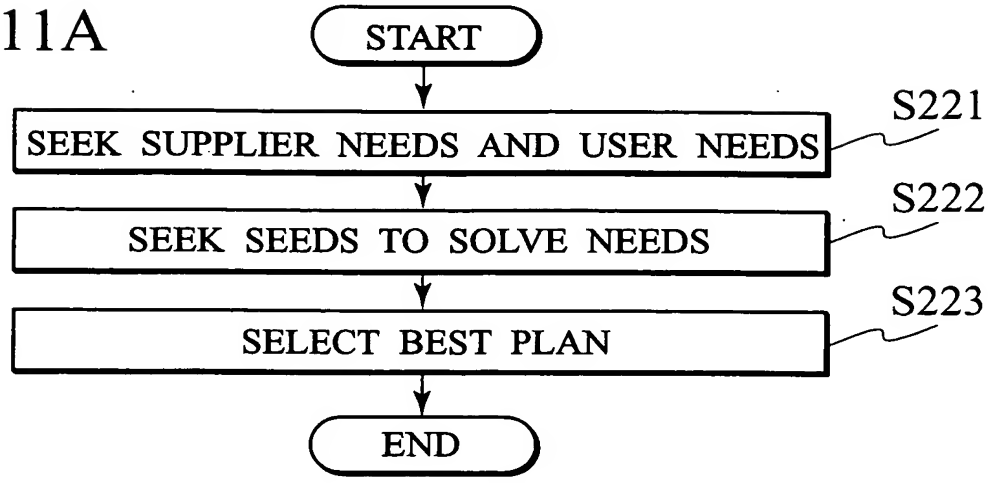


FIG. 11B

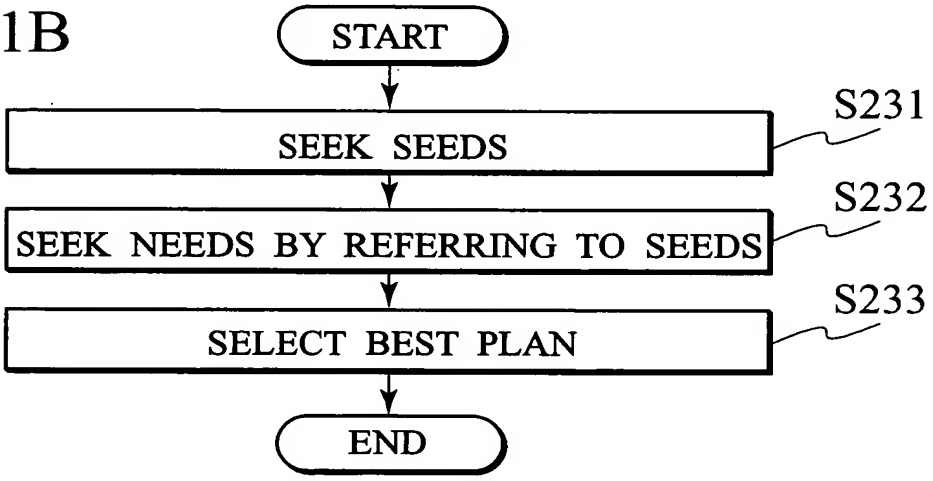


FIG. 11C

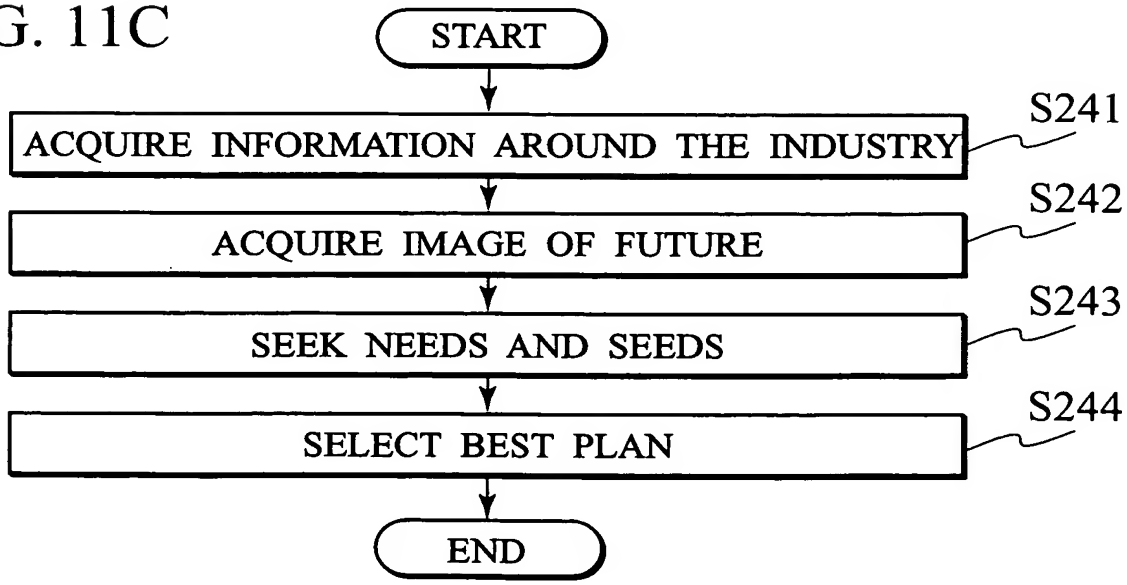


FIG. 12

CONSTITUENT ELEMENT INDICATING SECTION 251

SUPPLIER CARD INDICATING SECTION 252

USER CARD INDICATING SECTION 253

CONSTITUENT ELEMENT	SUPPLIER NEEDS/SEEDS	USER NEED/SEEDS
ROLLER	MINIATURIZATION OF ROLLER → ROLLER SPEEDUP → PROCESSING SPEEDUP → PRODUCTIVITY IMPROVEMENT	STANDARDIZATION OF ROLLER → SIMPLIFICATION OF MANUFACTURING → SIMPLIFICATION OF DESIGN → COST REDUCTION
LUBRICANT	⋮	⋮
CPU	⋮	⋮

P201

FIG. 13

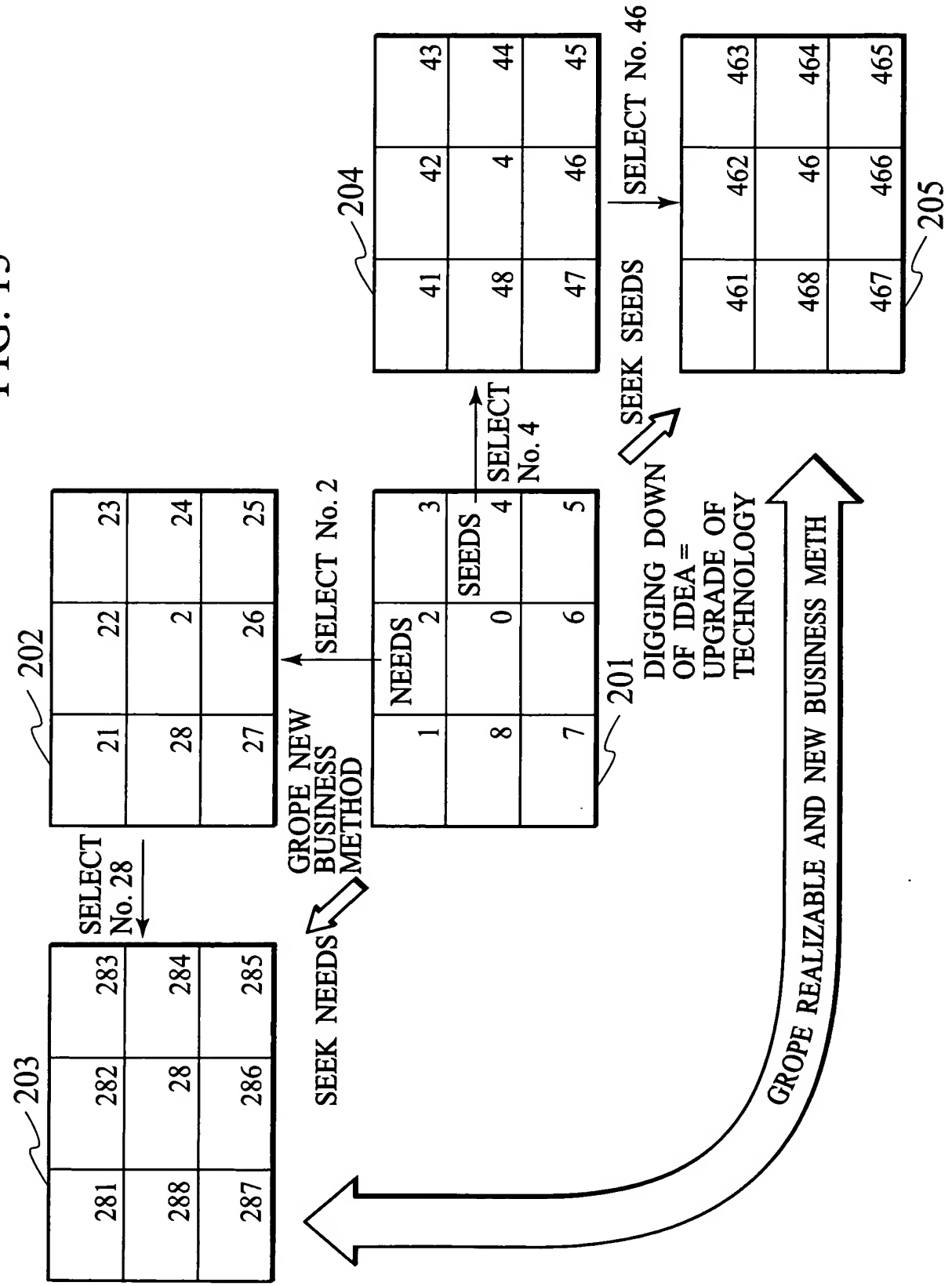

201
NEEDS
SEEDS
1
2
3
8
0
4
7
6
5
202
21
22
23
28
2
24
27
26
25
203
281
282
283
288
28
284
287
286
285
204
41
42
43
48
4
44
47
46
45
205
461
462
463
468
46
464
467
466
465
SELECT No. 28
SELECT No. 2
SELECT No. 4
SELECT No. 46
SEEK NEEDS
GROPE NEW BUSINESS METHOD
DIGGING DOWN OF IDEA = UPGRADE OF TECHNOLOGY
SEEK SEEDS
GROPE REALIZABLE AND NEW BUSINESS METH

FIG. 14

15

ITEM	SEARCH KEY
SPECIFICATION	COMPUTER, ELECTRONIC CALCULATOR, INFORMATION EQUIPMENT
CLAIMS	CPU, CENTRAL PROCESSING ARITHMETIC UNIT, ARITHMETIC UNIT
ADVANTAGE	SPEEDUP, PROCESSING SPEEDUP
PATENT CLASSIFICATION	G06F17/00
----	----

FIG. 15

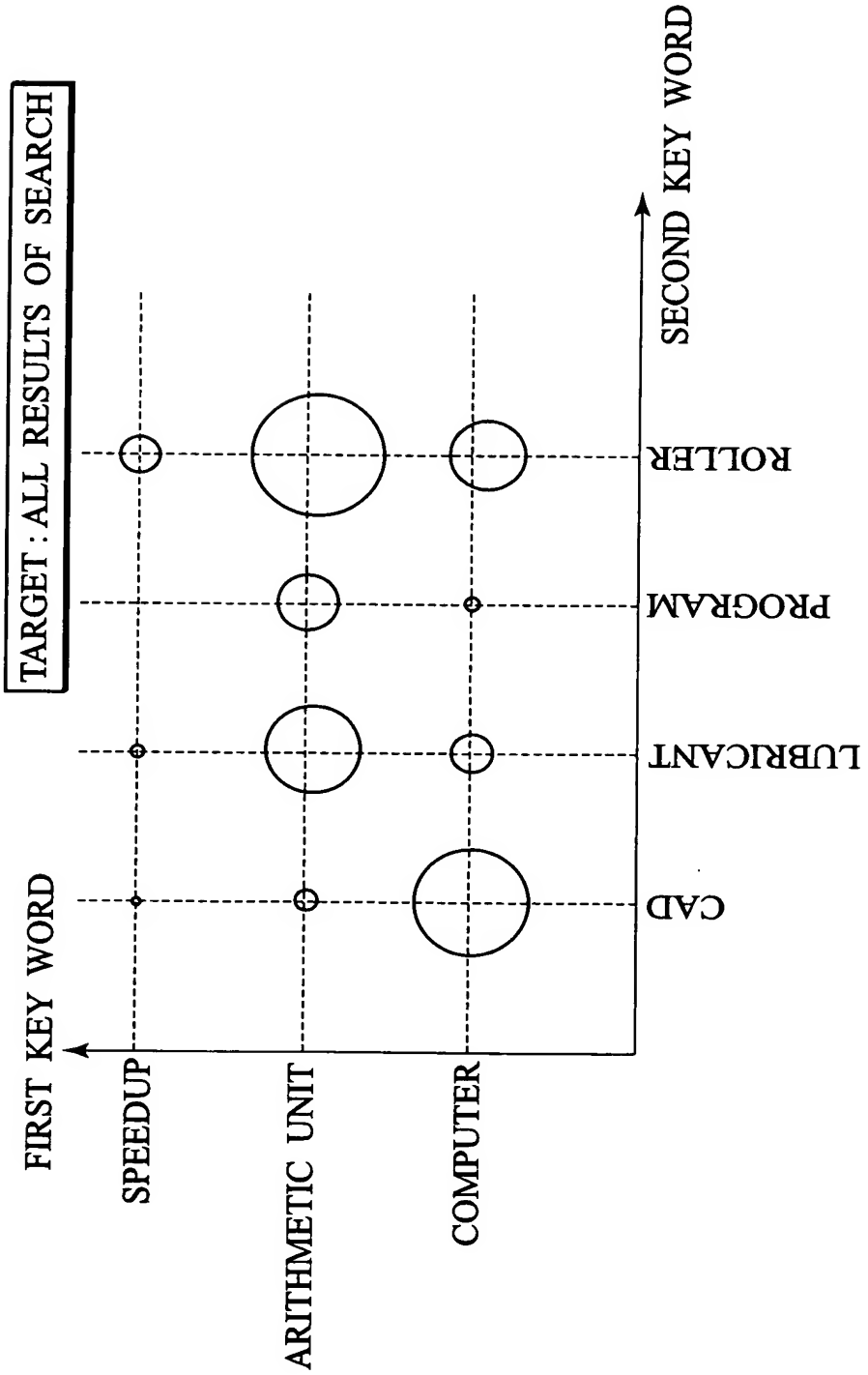

TARGET : ALL RESULTS OF SEARCH
FIRST KEY WORD
SPEEDUP
ARITHMETIC UNIT
COMPUTER
SECOND KEY WORD
ROLLER
PROGRAM
LUBRICANT
CAD

FIG. 16A

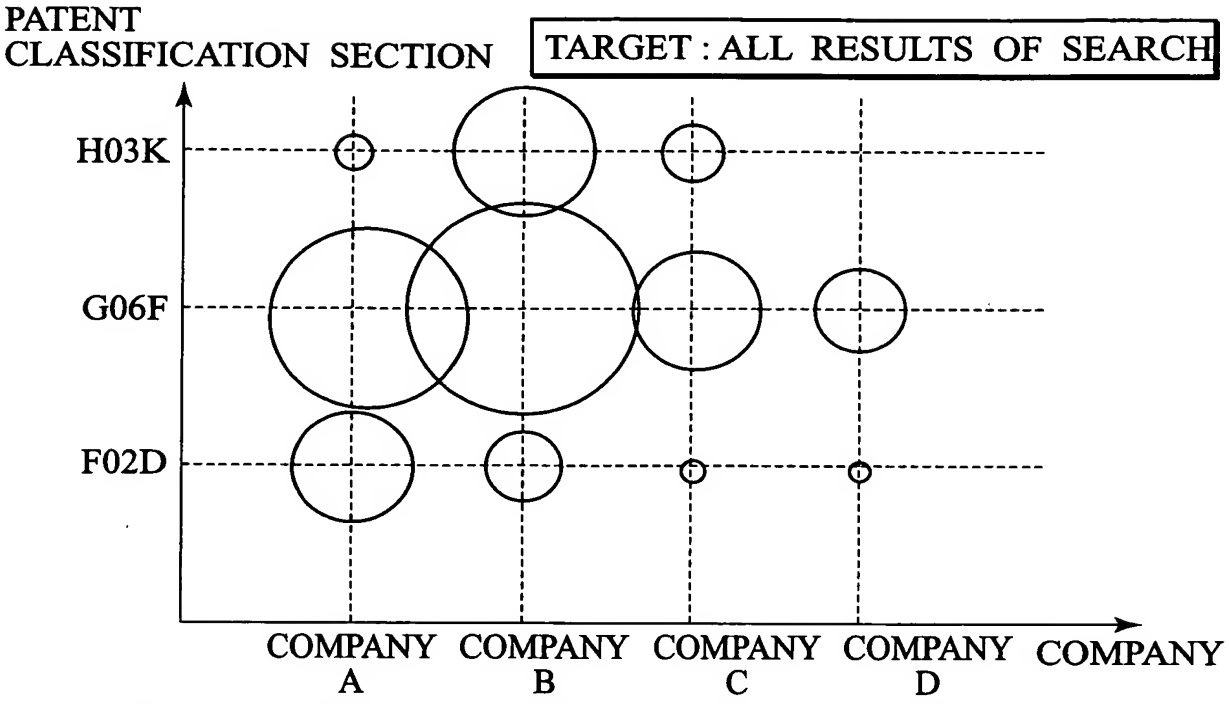


FIG. 16B

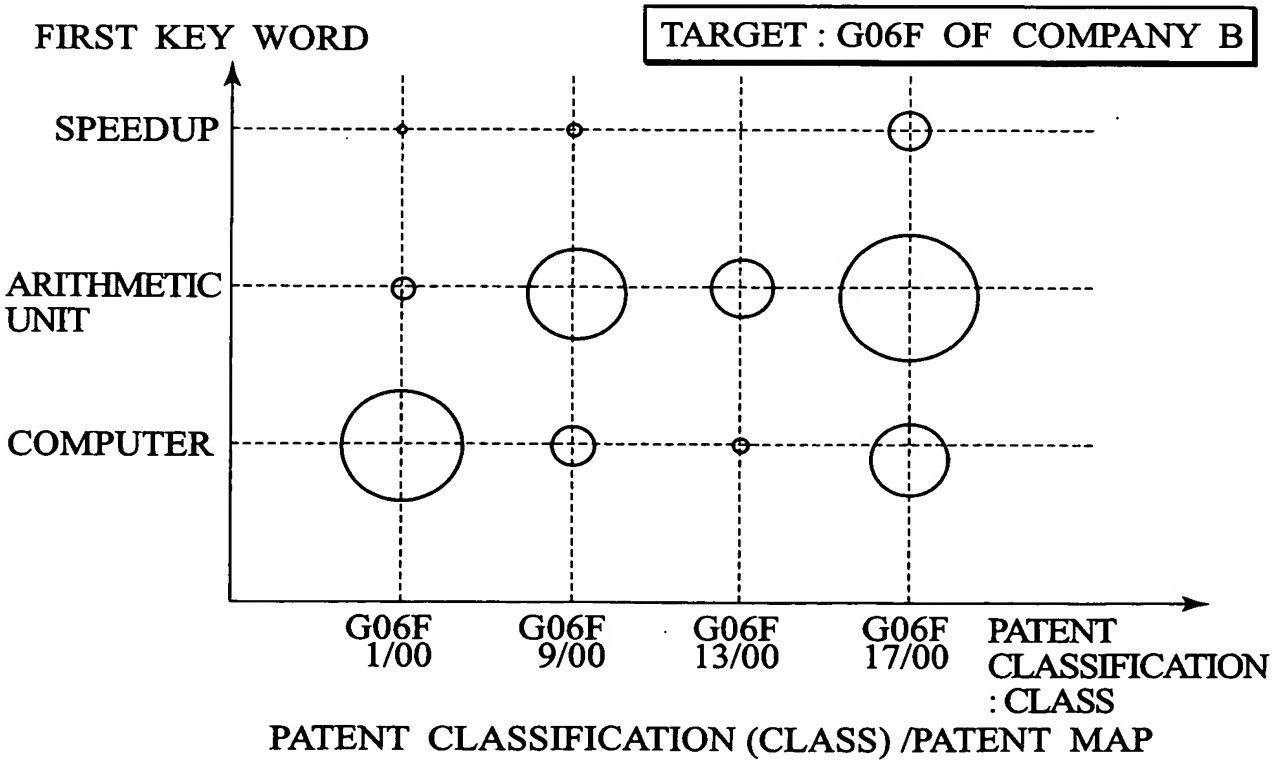


FIG. 17A

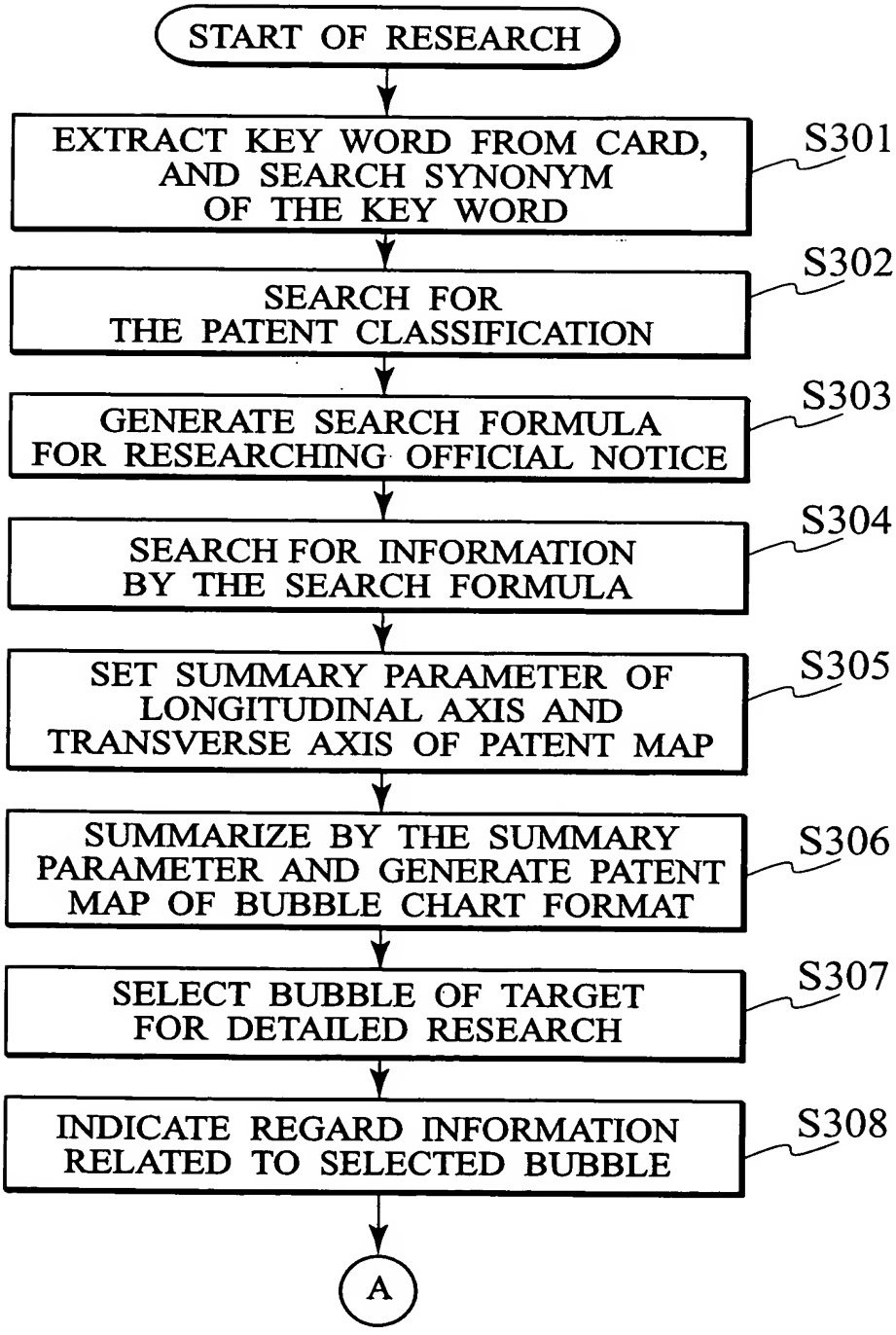

START OF RESEARCH
EXTRACT KEY WORD FROM CARD, AND SEARCH SYNONYM OF THE KEY WORD
S301
SEARCH FOR THE PATENT CLASSIFICATION
S302
GENERATE SEARCH FORMULA FOR RESEARCHING OFFICIAL NOTICE
S303
SEARCH FOR INFORMATION BY THE SEARCH FORMULA
S304
SET SUMMARY PARAMETER OF LONGITUDINAL AXIS AND TRANSVERSE AXIS OF PATENT MAP
S305
SUMMARIZE BY THE SUMMARY PARAMETER AND GENERATE PATENT MAP OF BUBBLE CHART FORMAT
S306
SELECT BUBBLE OF TARGET FOR DETAILED RESEARCH
S307
INDICATE REGARD INFORMATION RELATED TO SELECTED BUBBLE
S308
A

FIG. 17B

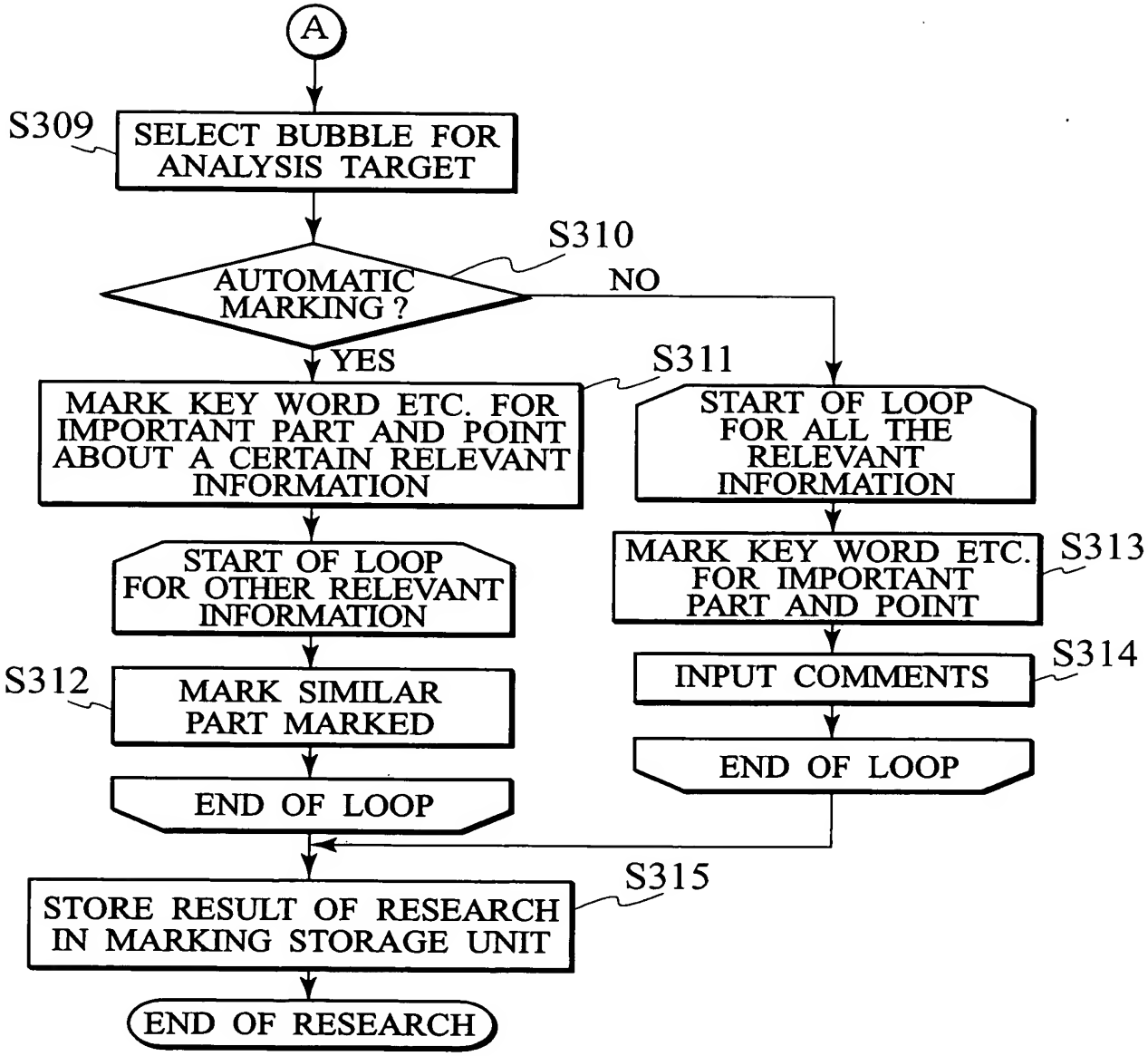

A
S309
SELECT BUBBLE FOR ANALYSIS TARGET
S310
AUTOMATIC MARKING ?
NO
YES
S311
MARK KEY WORD ETC. FOR IMPORTANT PART AND POINT ABOUT A CERTAIN RELEVANT INFORMATION
START OF LOOP FOR ALL THE RELEVANT INFORMATION
START OF LOOP FOR OTHER RELEVANT INFORMATION
MARK KEY WORD ETC. FOR IMPORTANT PART AND POINT
S313
S312
MARK SIMILAR PART MARKED
INPUT COMMENTS
S314
END OF LOOP
END OF LOOP
S315
STORE RESULT OF RESEARCH IN MARKING STORAGE UNIT
END OF RESEARCH

FIG. 18

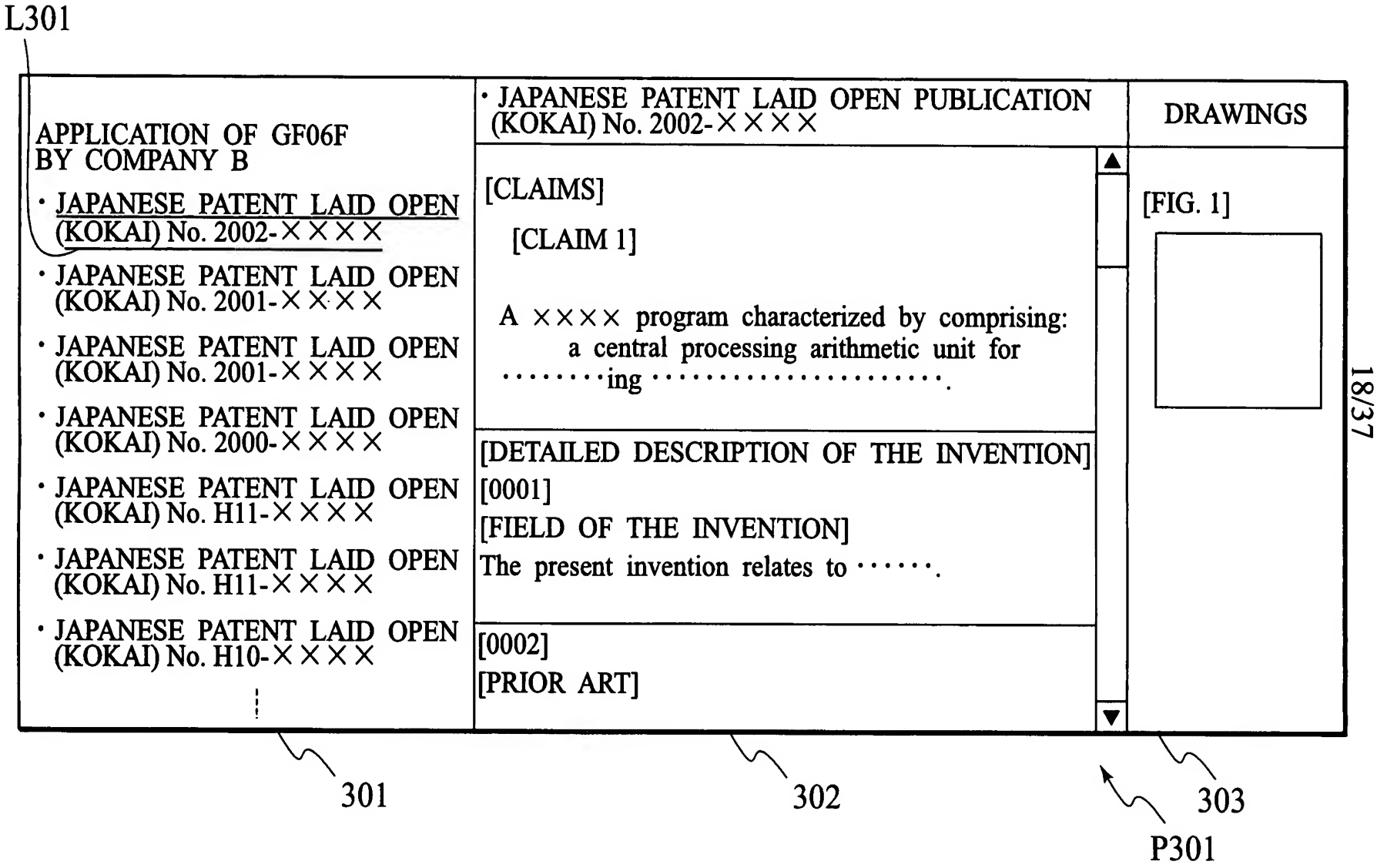


FIG. 19

13

ASSESSMENT CODE	ASSESSMENTS
0	NONE (INITIAL VALUE)
101	REFERENCE TO CLAIMS
102	REFERENCE TO PRIOR ART
103	REFERENCE TO APPLICATION FIELD
⋮	⋮
201	NON-RELEVANCY
202	RELEVANCY
⋮	⋮
301	REQUIREMENT TO RESEARCH OF PROSECUTION HISTORY PURSUIT
⋮	⋮

FIG. 20

20

PUBLICATION No.	CLAIMS	PRIOR ART	EMBODIMENT	ASSESSMENT CODE	PATENT CLASSIFICATION	COMMENTS
JAPANESE PATENT LAID OPEN (KOKAI) No. 2002-××××	PROGRAM AUTOMATIZATION	CPU	PROGRAM AUTOMATIZATION PRINTING	101 201	G06F 17/00	EMPHASIS IN MARKETING
JAPANESE PATENT LAID OPEN (KOKAI) No. 2001-××××	PROGRAM		PROCESSOR	102 202 301	G06F 13/00	
⋮	⋮	⋮	⋮	⋮	⋮	

FIG. 21

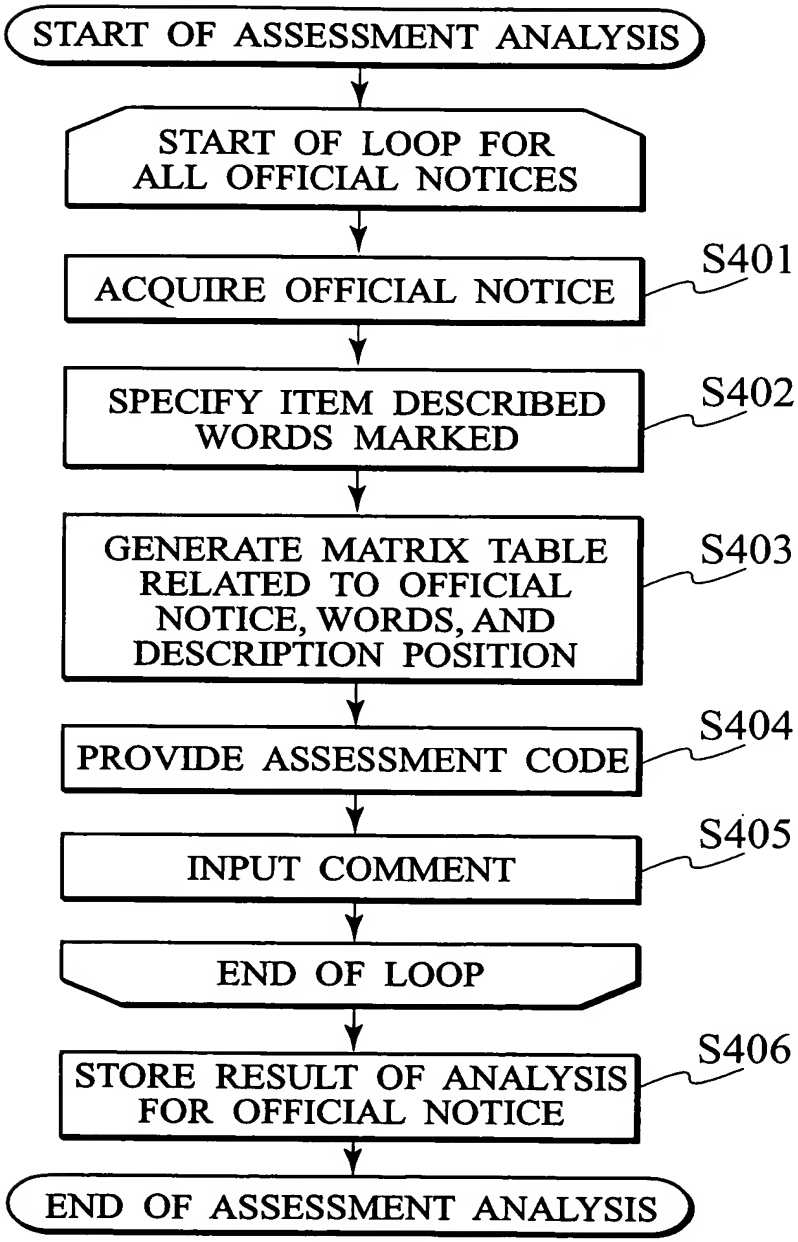

START OF ASSESSMENT ANALYSIS
START OF LOOP FOR ALL OFFICIAL NOTICES
ACQUIRE OFFICIAL NOTICE
S401
SPECIFY ITEM DESCRIBED WORDS MARKED
S402
GENERATE MATRIX TABLE RELATED TO OFFICIAL NOTICE, WORDS, AND DESCRIPTION POSITION
S403
PROVIDE ASSESSMENT CODE
S404
INPUT COMMENT
S405
END OF LOOP
STORE RESULT OF ANALYSIS FOR OFFICIAL NOTICE
S406
END OF ASSESSMENT ANALYSIS

FIG. 22

L401

OFFICIAL NOTICE LIST DISPLAY WINDOW

PUBLICATION No.	CLAIMS	PRIOR ART	EMBODIMENT	ADVANTAGE	ASSESSMENT CODE	PATENT CLASSIFICATION	COMMENTS
JAPANESE PATENT LAID OPEN(KOKAI) No. 2002-×××××	PROGRAM AUTOMATIZATION	CPU	PROGRAM AUTOMATIZATION PRINTING	PROGRAM AUTOMATIZATION		G06F 17/00	
JAPANESE PATENT LAID OPEN(KOKAI) No. 2001-×××××	PROGRAM		PROCESSOR	PROGRAM			
----	----	----	----	----	----	----	----
----	----	----	----	----	----	----	----

401 402 403 404

P401

FIG. 23

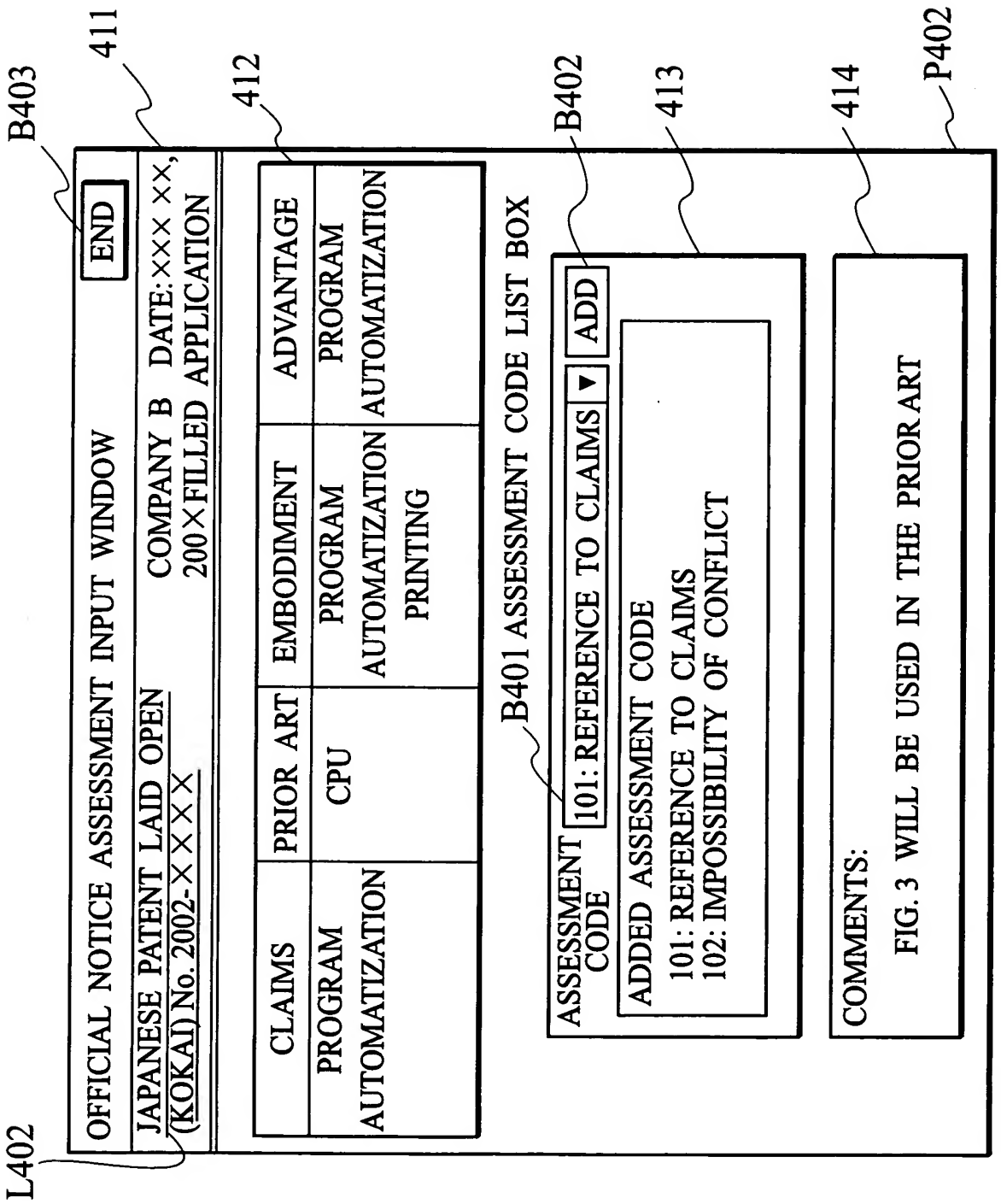

L402
OFFICIAL NOTICE ASSESSMENT INPUT WINDOW
END
B403
411
JAPANESE PATENT LAID OPEN (KOKAI) No. 2002-XXXX
COMPANY B DATE: XXX XX, 200X FILLED APPLICATION
412
CLAIMS
PRIOR ART
EMBODIMENT
ADVANTAGE
PROGRAM AUTOMATIZATION
CPU
PROGRAM AUTOMATIZATION PRINTING
PROGRAM AUTOMATIZATION
B401 ASSESSMENT CODE LIST BOX
B402
413
414
P402
ASSESSMENT CODE
101: REFERENCE TO CLAIMS
ADD
ADDED ASSESSMENT CODE
101: REFERENCE TO CLAIMS
102: IMPOSSIBILITY OF CONFLICT
COMMENTS:
FIG. 3 WILL BE USED IN THE PRIOR ART

FIG. 24

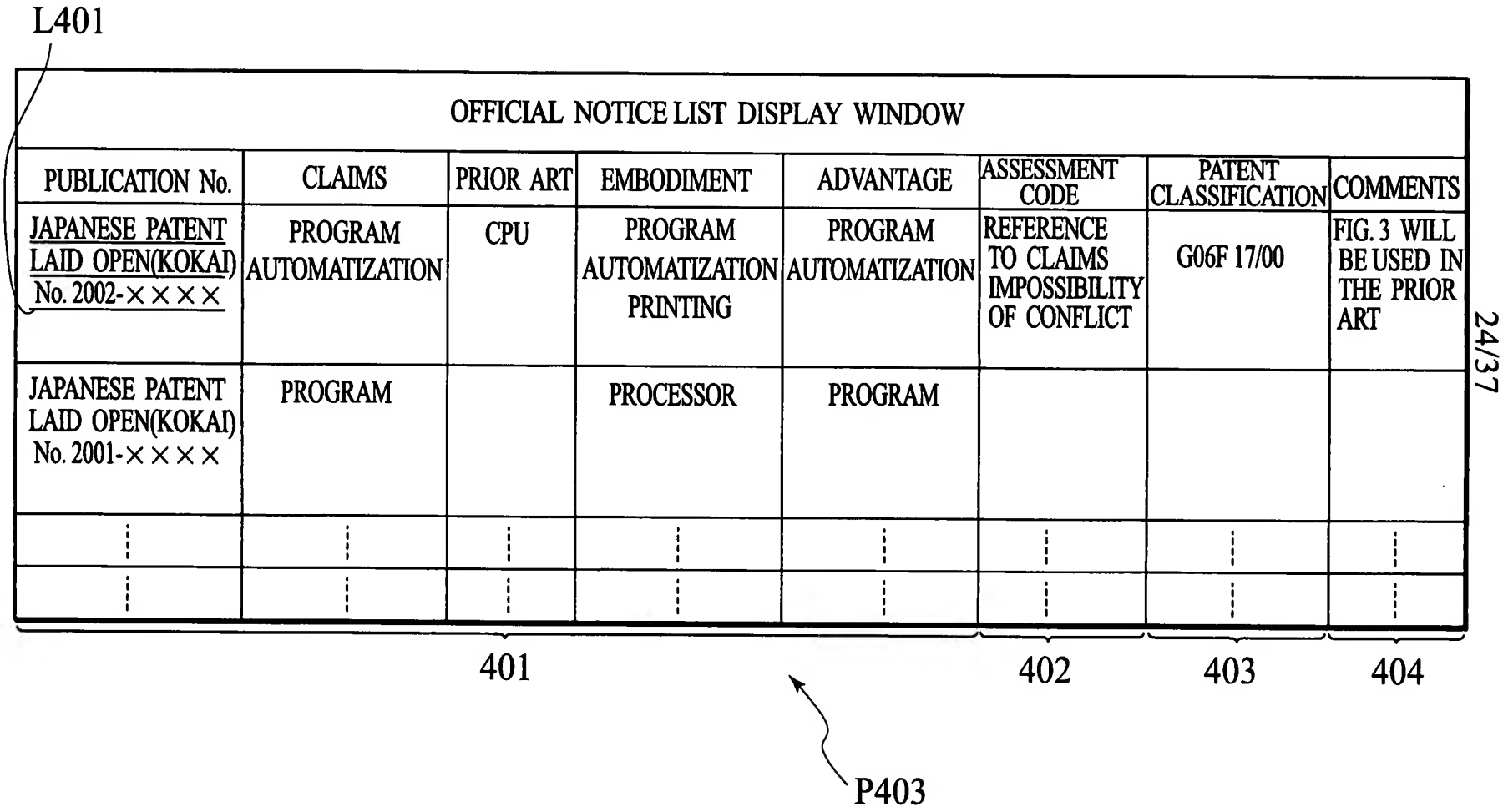


FIG. 25

21

CARD No.	HIERARCHY	POSITION	PARENT CARD No.	THEME	WORDS	COMMENT CODE	DOCUMENT REFLECTION ITEM
1	0	0	-	PRESS APPARATUS			NON-REFLECTION
2	0	1	-	RELIABILITY IMPROVEMENT	AIM AT ERROR RATE TO 7% OR LESS	1	NON-REFLECTION
3	0	2	-	PRODUCTIVITY IMPROVEMENT	AIM AT 10-FOLD IMPROVEMENT	1	OBJECT
4	0	3	-	COST REDUCTION	10% COST CUTTING	1	NON-REFLECTION
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
21	1	1	2	PROCESSING SPEEDUP	AIM AT 10-FOLD IMPROVEMENT	1	NON-REFLECTION
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
21a	2	a	21	TRANSPORTATION SPEEDUP	FEAR OF QUALITY DEGRADATION	2	OTHER EMBODIMENTS
21b	2	b	21	ROLLER SPEEDUP	AUTOMATIZATION OF CONTROLLER	2	FIRST EMBODIMENT
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 26

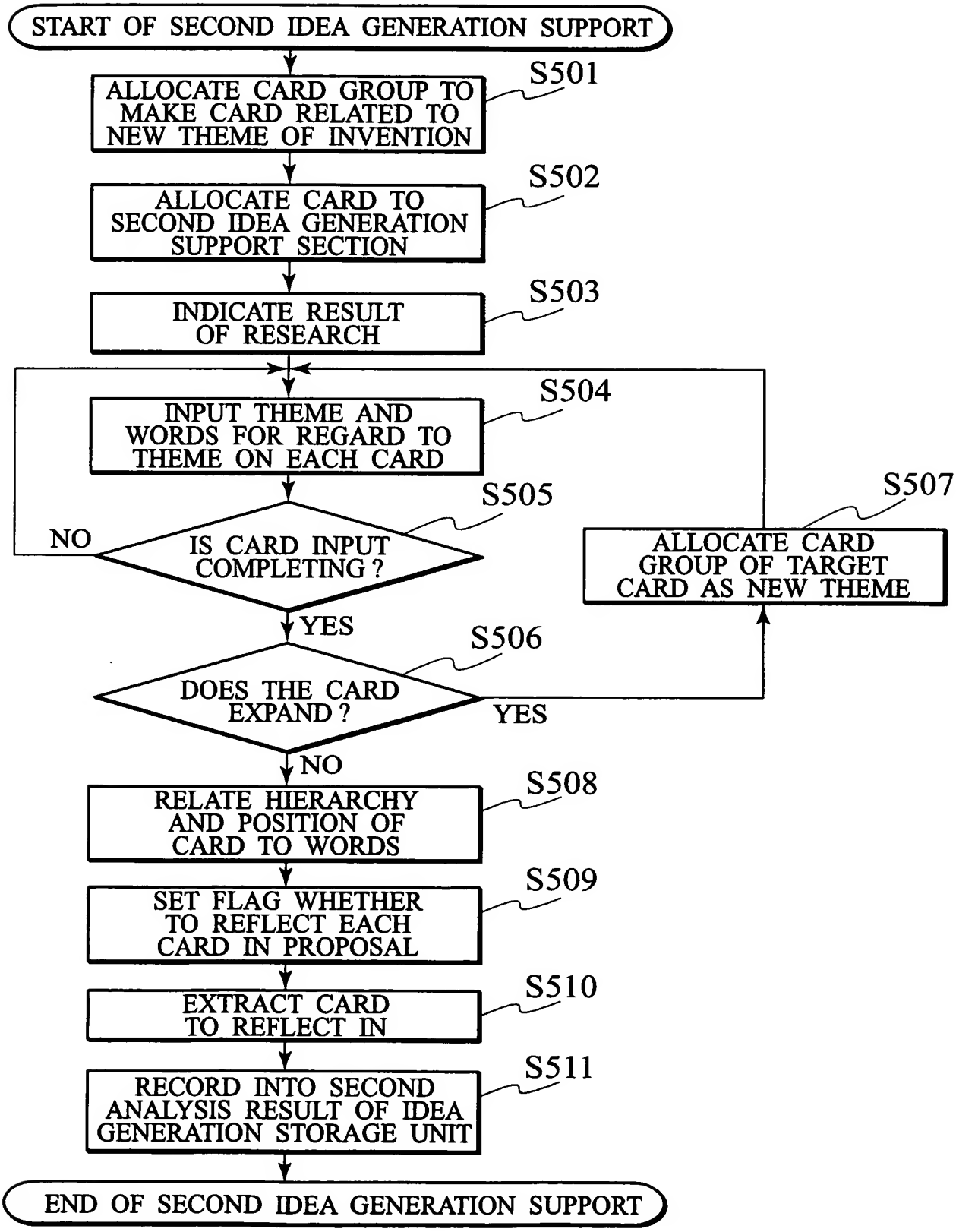

START OF SECOND IDEA GENERATION SUPPORT
ALLOCATE CARD GROUP TO MAKE CARD RELATED TO NEW THEME OF INVENTION
S501
ALLOCATE CARD TO SECOND IDEA GENERATION SUPPORT SECTION
S502
INDICATE RESULT OF RESEARCH
S503
INPUT THEME AND WORDS FOR REGARD TO THEME ON EACH CARD
S504
IS CARD INPUT COMPLETING ?
S505
NO
YES
ALLOCATE CARD GROUP OF TARGET CARD AS NEW THEME
S507
DOES THE CARD EXPAND ?
S506
YES
NO
RELATE HIERARCHY AND POSITION OF CARD TO WORDS
S508
SET FLAG WHETHER TO REFLECT EACH CARD IN PROPOSAL
S509
EXTRACT CARD TO REFLECT IN
S510
RECORD INTO SECOND ANALYSIS RESULT OF IDEA GENERATION STORAGE UNIT
S511
END OF SECOND IDEA GENERATION SUPPORT

FIG. 27

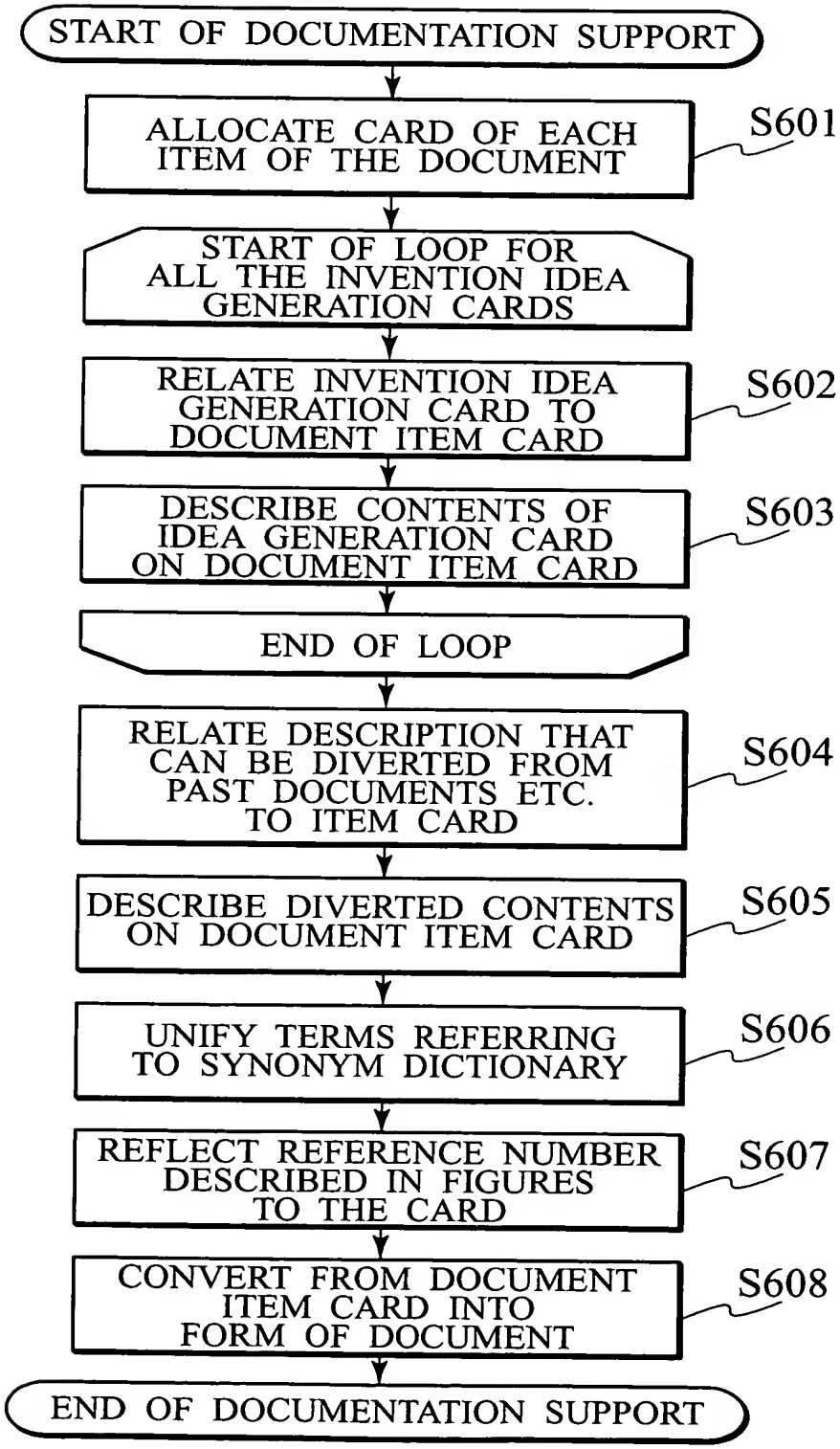

START OF DOCUMENTATION SUPPORT
ALLOCATE CARD OF EACH ITEM OF THE DOCUMENT
S601
START OF LOOP FOR ALL THE INVENTION IDEA GENERATION CARDS
RELATE INVENTION IDEA GENERATION CARD TO DOCUMENT ITEM CARD
S602
DESCRIBE CONTENTS OF IDEA GENERATION CARD ON DOCUMENT ITEM CARD
S603
END OF LOOP
RELATE DESCRIPTION THAT CAN BE DIVERTED FROM PAST DOCUMENTS ETC. TO ITEM CARD
S604
DESCRIBE DIVERTED CONTENTS ON DOCUMENT ITEM CARD
S605
UNIFY TERMS REFERRING TO SYNONYM DICTIONARY
S606
REFLECT REFERENCE NUMBER DESCRIBED IN FIGURES TO THE CARD
S607
CONVERT FROM DOCUMENT ITEM CARD INTO FORM OF DOCUMENT
S608
END OF DOCUMENTATION SUPPORT

FIG. 28

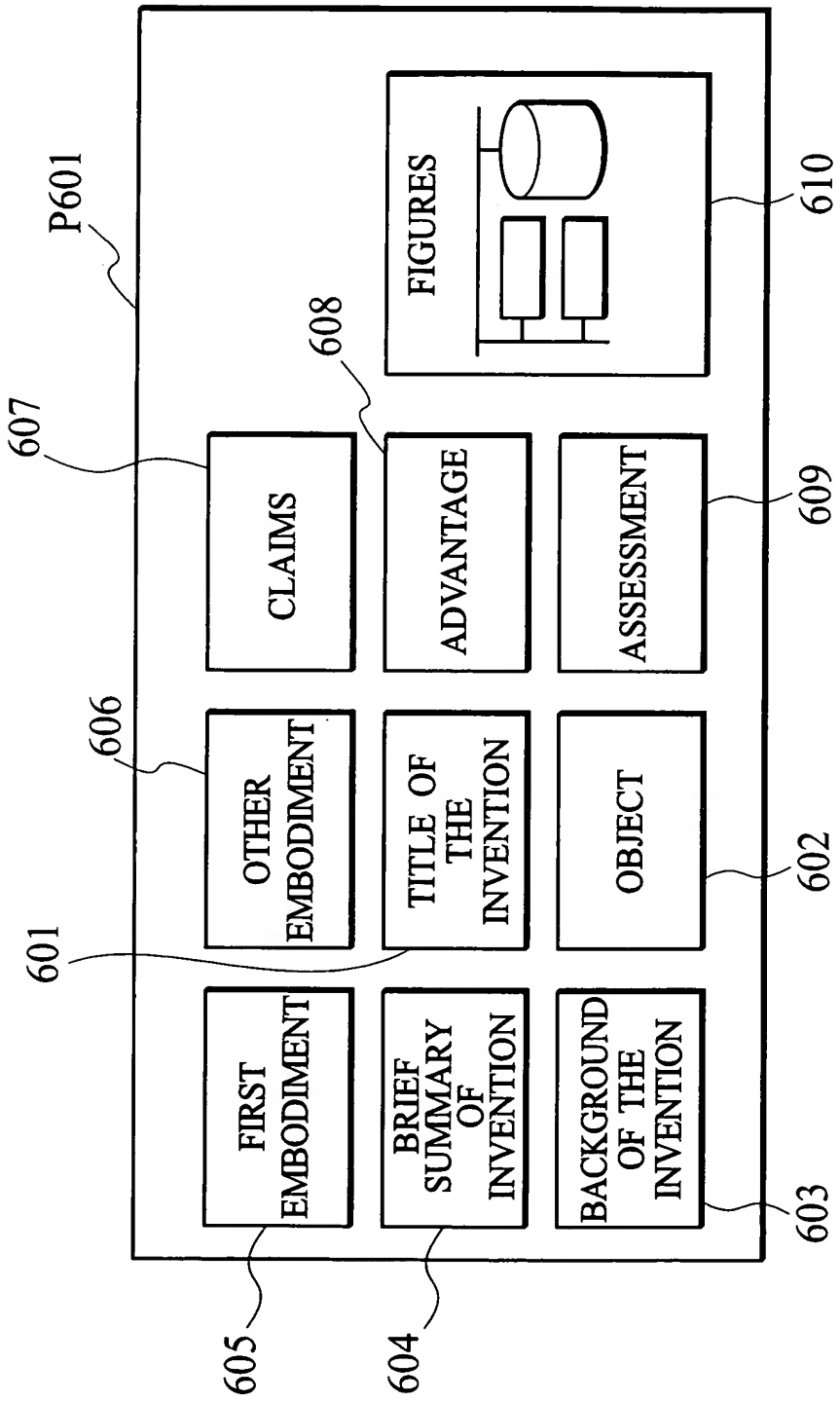

P601
FIGURES
610
608
607
CLAIMS
ADVANTAGE
ASSESSMENT
609
606
OTHER EMBODIMENT
TITLE OF THE INVENTION
OBJECT
602
601
FIRST EMBODIMENT
BRIEF SUMMARY OF INVENTION
BACKGROUND OF THE INVENTION
603
605
604

FIG. 29

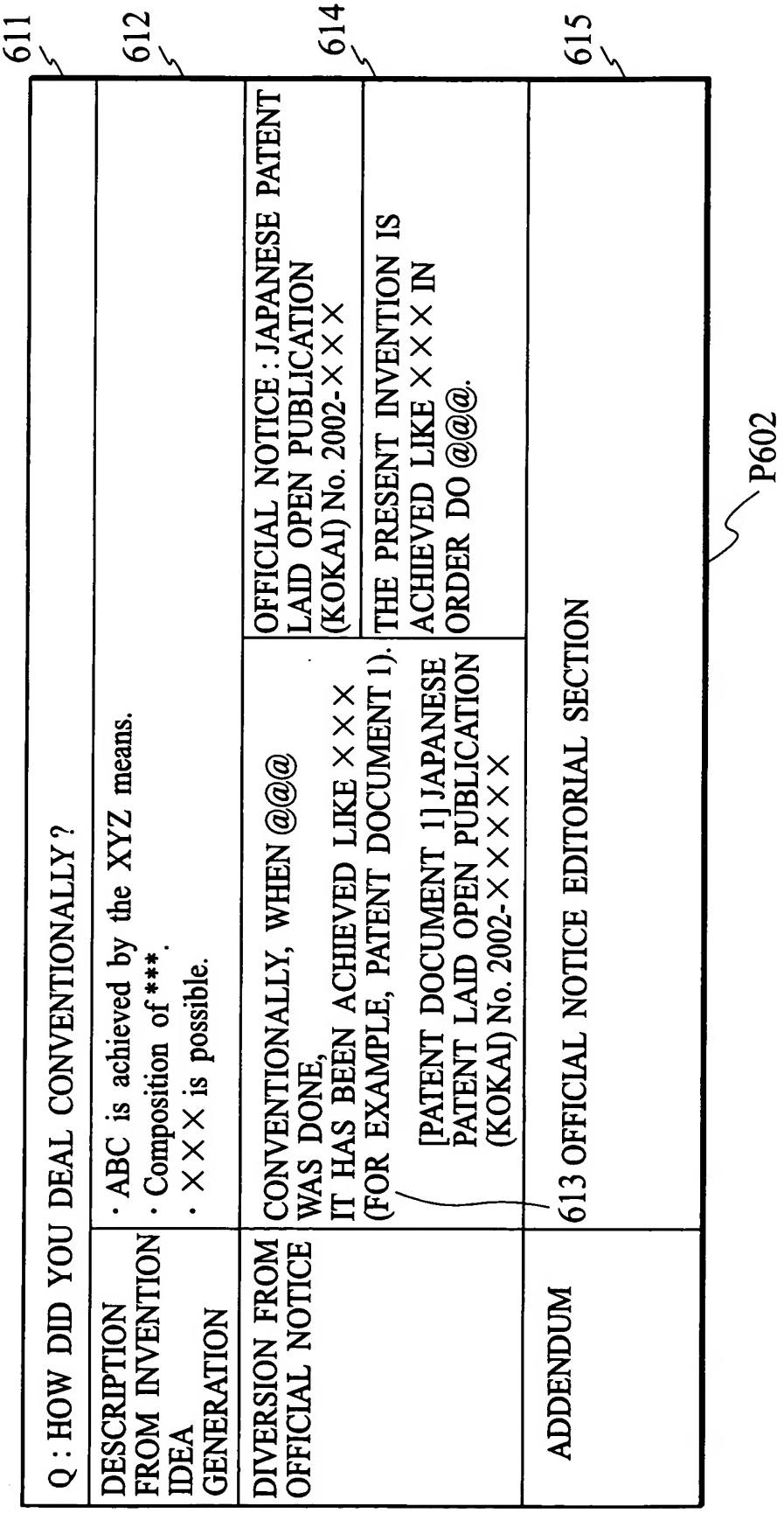

611
612
614
615
Q : HOW DID YOU DEAL CONVENTIONALLY ?
DESCRIPTION FROM INVENTION IDEA GENERATION
· ABC is achieved by the XYZ means.
· Composition of ***.
· ××× is possible.
DIVERSION FROM OFFICIAL NOTICE
CONVENTIONALLY, WHEN @@@ WAS DONE, IT HAS BEEN ACHIEVED LIKE ××× (FOR EXAMPLE, PATENT DOCUMENT 1).
[PATENT DOCUMENT 1] JAPANESE PATENT LAID OPEN PUBLICATION (KOKAI) No. 2002-××××××
OFFICIAL NOTICE : JAPANESE PATENT LAID OPEN PUBLICATION (KOKAI) No. 2002-×××
THE PRESENT INVENTION IS ACHIEVED LIKE ××× IN ORDER DO @@@.
ADDENDUM
613 OFFICIAL NOTICE EDITORIAL SECTION
P602

FIG. 30

23

PUBLICATION No.	JAPAN	UNITED STATES	EUROPE
×,×××,×××	出力手段	display	output
×,×××,×××	表示手段	display	display
×,×××,×××	表示装置	display	display
----------	----------	----------	----------

FIG. 31

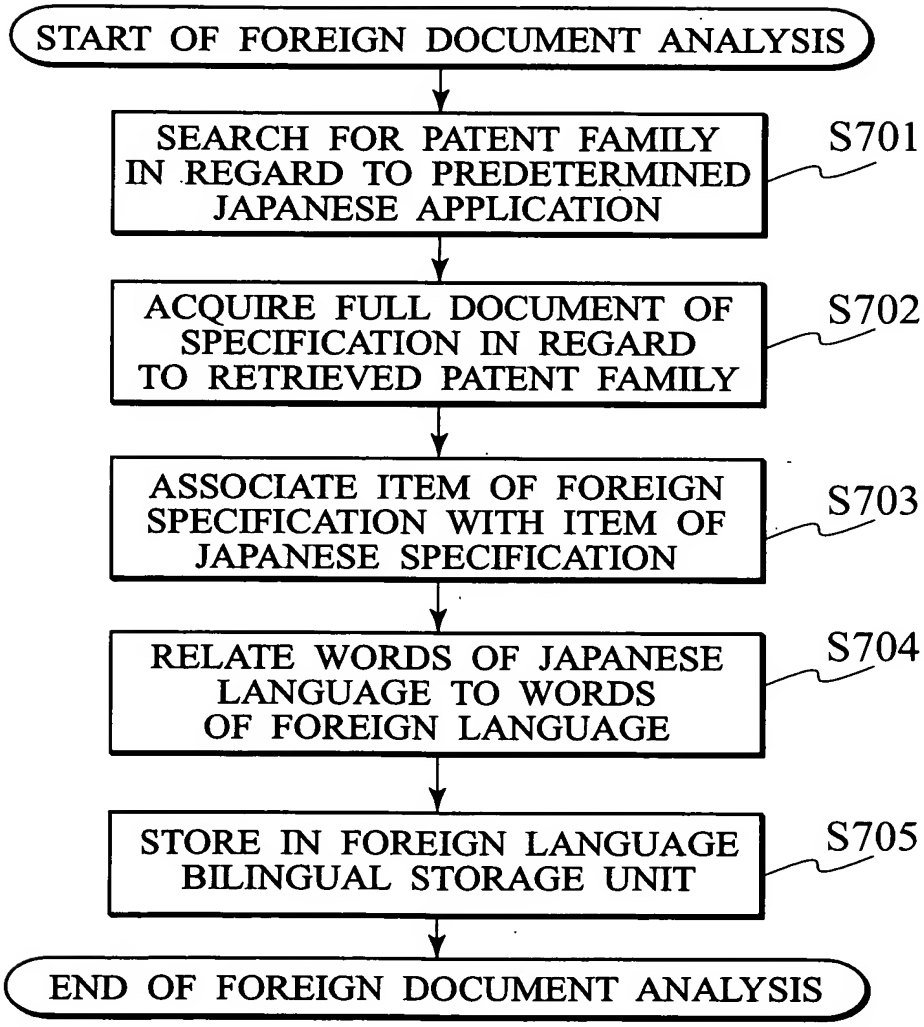

START OF FOREIGN DOCUMENT ANALYSIS
SEARCH FOR PATENT FAMILY IN REGARD TO PREDETERMINED JAPANESE APPLICATION
S701
ACQUIRE FULL DOCUMENT OF SPECIFICATION IN REGARD TO RETRIEVED PATENT FAMILY
S702
ASSOCIATE ITEM OF FOREIGN SPECIFICATION WITH ITEM OF JAPANESE SPECIFICATION
S703
RELATE WORDS OF JAPANESE LANGUAGE TO WORDS OF FOREIGN LANGUAGE
S704
STORE IN FOREIGN LANGUAGE BILINGUAL STORAGE UNIT
S705
END OF FOREIGN DOCUMENT ANALYSIS

FIG. 32

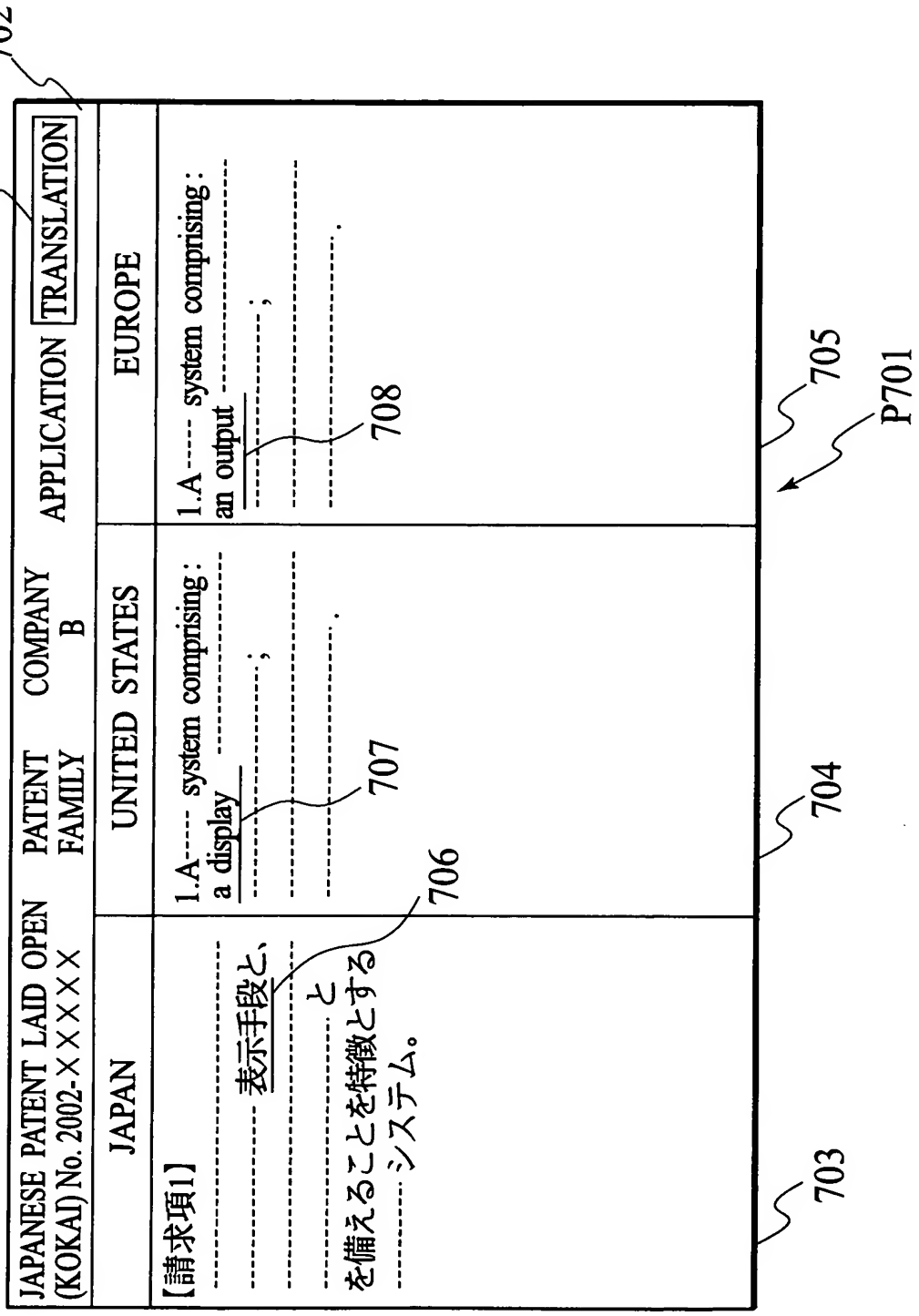

B701
702
JAPANESE PATENT LAID OPEN (KOKAI) No. 2002-××××× PATENT FAMILY COMPANY B APPLICATION TRANSLATION
JAPAN
UNITED STATES
EUROPE
【請求項1】
表示手段と、
と
を備えることとを特徴とする
システム。
1.A system comprising:
a display
;
.
1.A system comprising:
an output
;
.
706
707
708
703
704
705
P701

FIG. 33

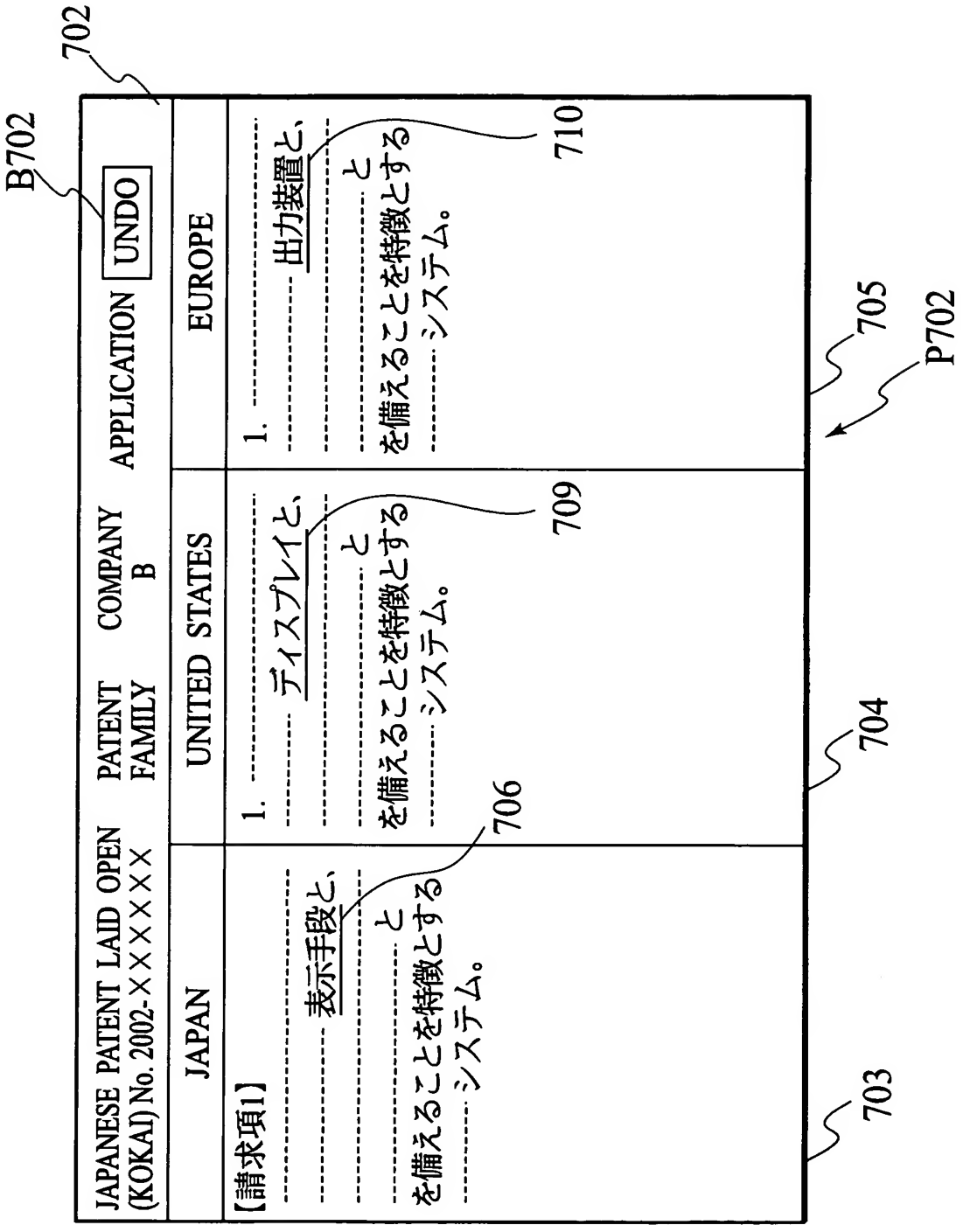

B702
702
JAPANESE PATENT LAID OPEN (KOKAI) No. 2002-××××××
PATENT FAMILY
COMPANY B
APPLICATION
UNDO
JAPAN
UNITED STATES
EUROPE
【請求項1】
表示手段と、
と
を備えることを特徴とする
システム。
1.
ディスプレイと、
と
を備えることを特徴とする
システム。
1.
出力装置と、
と
を備えることを特徴とする
システム。
706
709
710
703
704
705
P702

FIG. 34

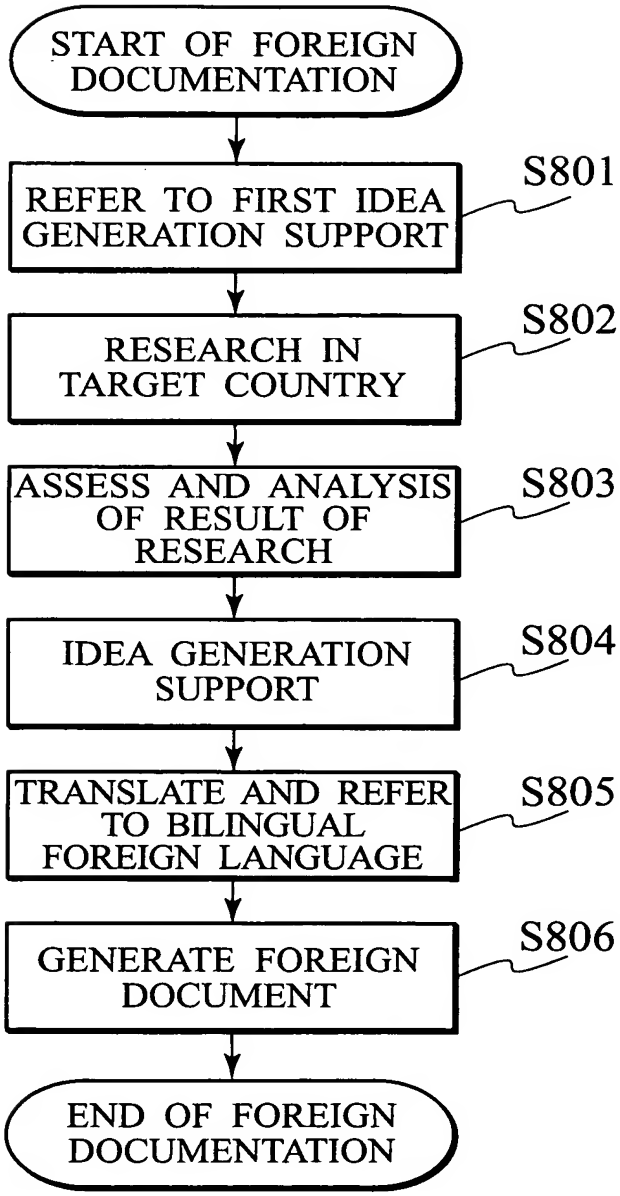
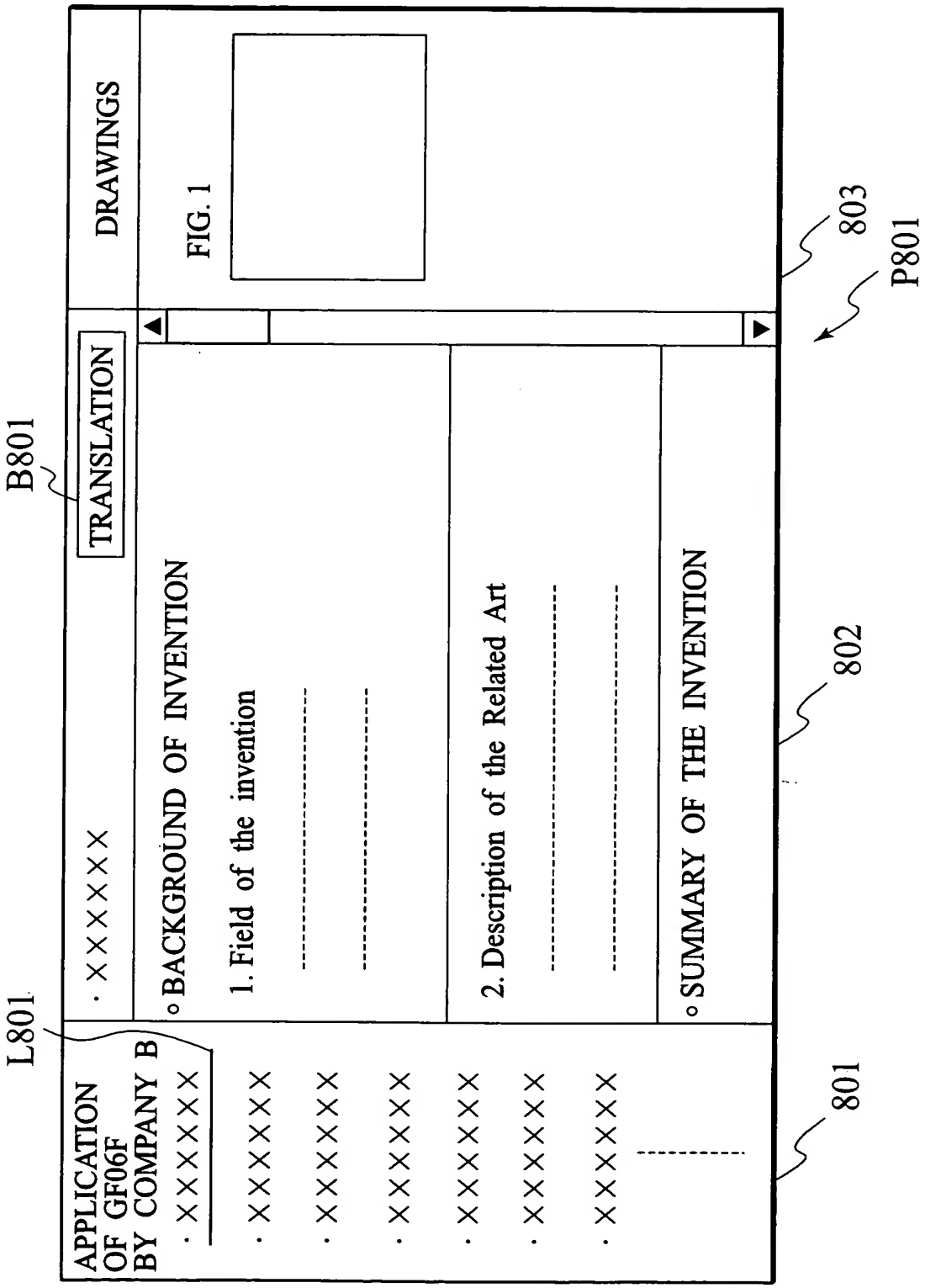

START OF FOREIGN DOCUMENTATION
REFER TO FIRST IDEA GENERATION SUPPORT
S801
RESEARCH IN TARGET COUNTRY
S802
ASSESS AND ANALYSIS OF RESULT OF RESEARCH
S803
IDEA GENERATION SUPPORT
S804
TRANSLATE AND REFER TO BILINGUAL FOREIGN LANGUAGE
S805
GENERATE FOREIGN DOCUMENT
S806
END OF FOREIGN DOCUMENTATION

FIG. 35

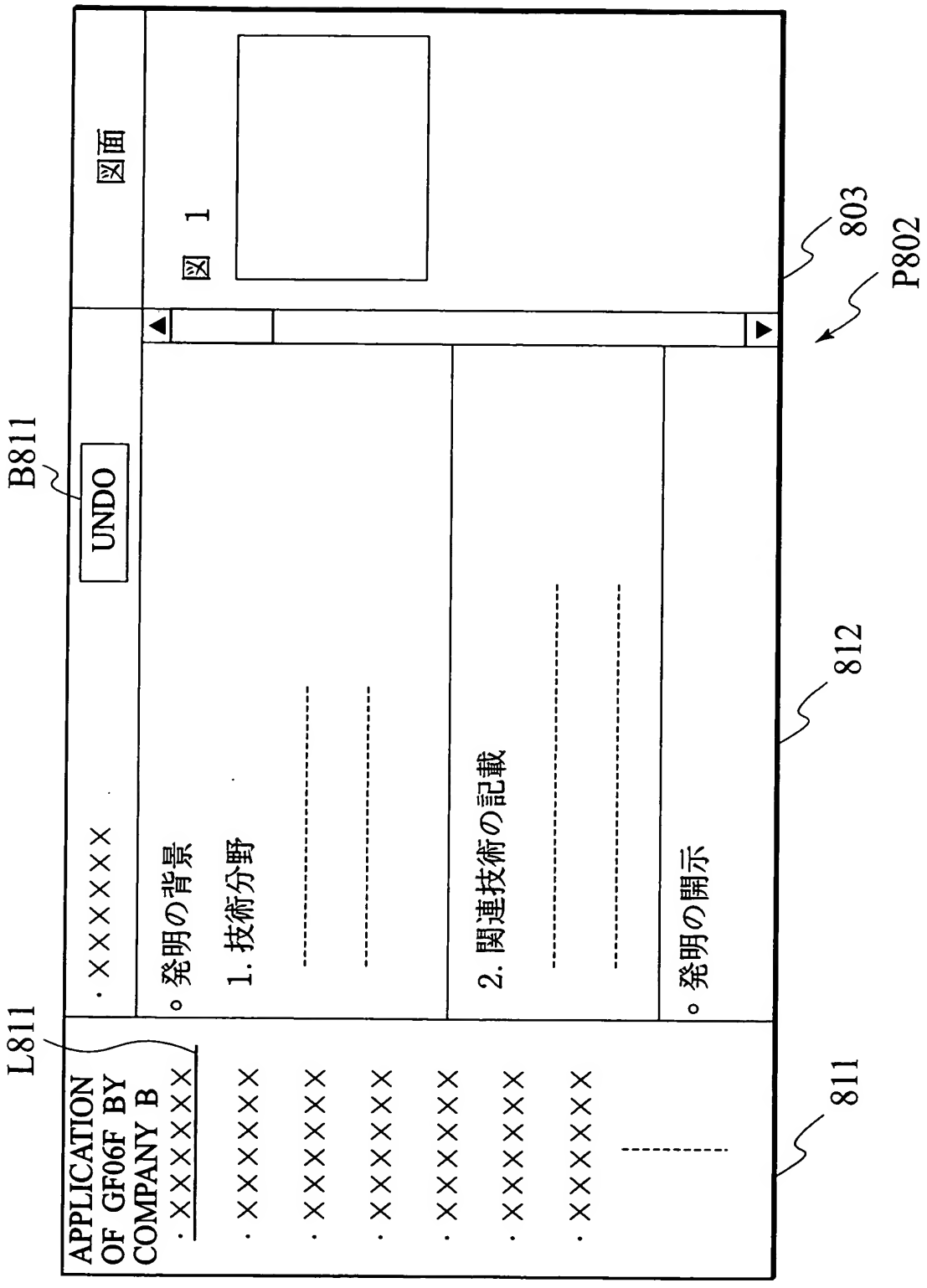

B801
TRANSLATION
DRAWINGS
FIG. 1
803
P801
L801
· XXXXXXX
APPLICATION OF GF06F BY COMPANY B
· XXXXXXX
· XXXXXXX
· XXXXXXX
· XXXXXXX
· XXXXXXX
· XXXXXXX
· XXXXXXX

° BACKGROUND OF INVENTION
1. Field of the invention

---
2. Description of the Related Art

° SUMMARY OF THE INVENTION
802
801

FIG. 36

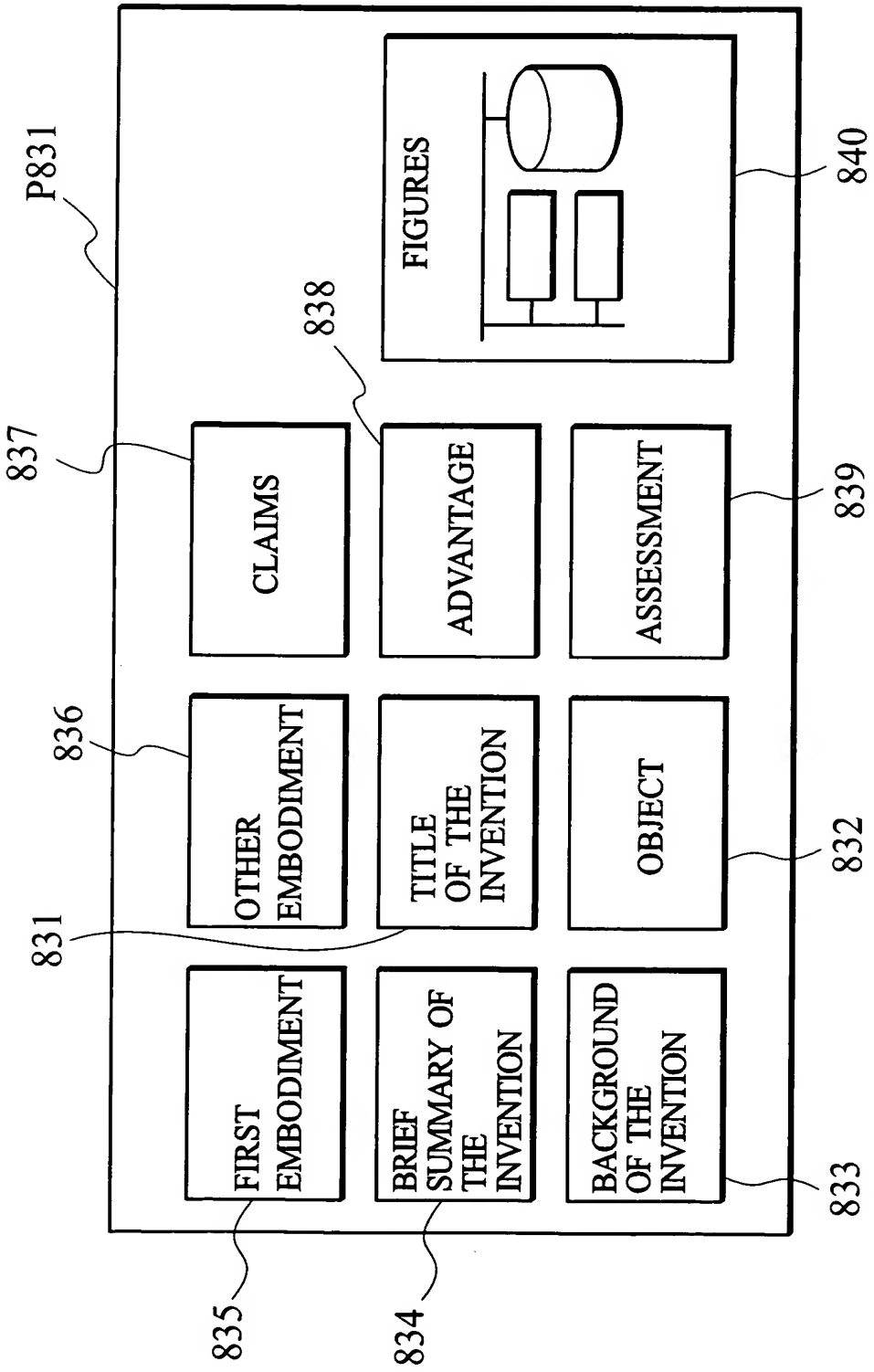

L811
B811
UNDO
図面
図 1
803
P802
812
811
APPLICATION OF GF06F BY COMPANY B
・XXXXXXX
・XXXXXXX
・XXXXXXX
・XXXXXXX
・XXXXXXX
・XXXXXXX
・XXXXXXX

・XXXXXX
。発明の背景
1. 技術分野

----
2. 関連技術の記載

。発明の開示

FIG. 37


P831
FIGURES
840
838
837
CLAIMS
ADVANTAGE
ASSESSMENT
839
836
OTHER EMBODIMENT
TITLE OF THE INVENTION
OBJECT
832
831
FIRST EMBODIMENT
BRIEF SUMMARY OF THE INVENTION
BACKGROUND OF THE INVENTION
833
835
834